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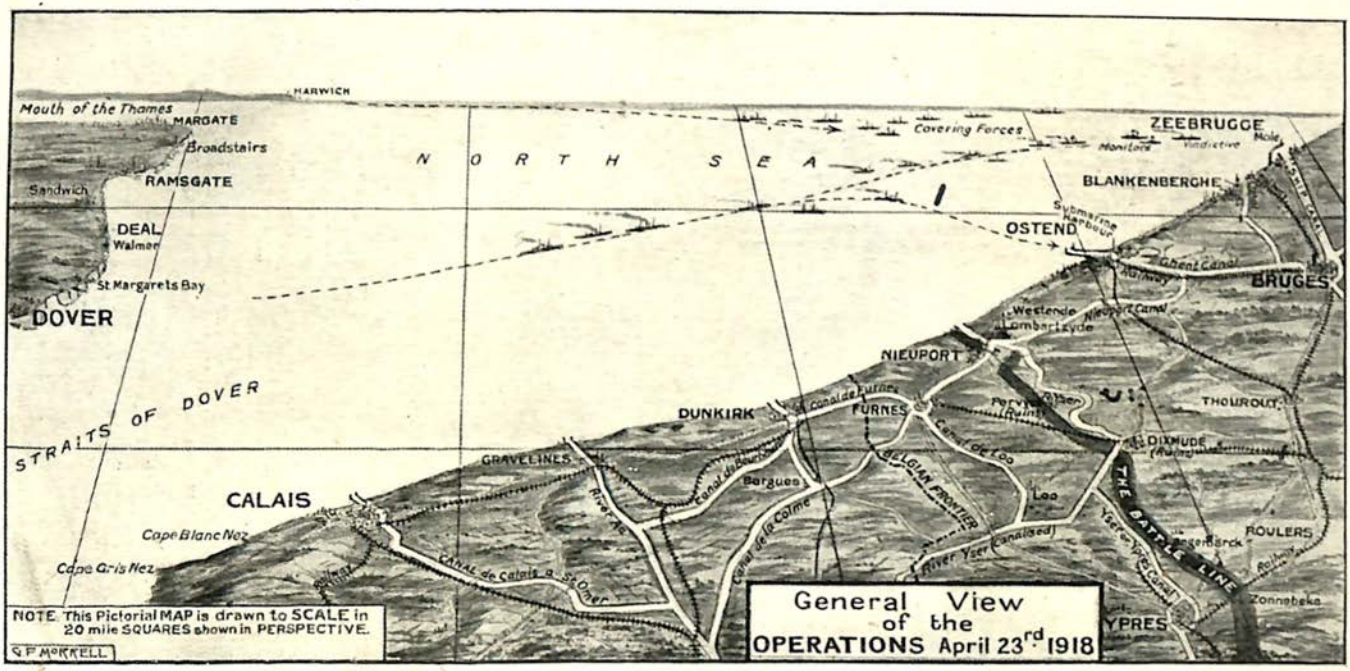

NOTE.—The Harwich covering force actually was far distant, off the Dutch coast. The small craft detailed for action against Ostend proceeded from Dunkirk.

OSTEND AND ZEEBRUGGE

APRIL 23: MAY 10, 1918

The Dispatches

OF

VICE-ADMIRAL SIR ROGER KEYES,

K.C.B., K.C.V.O.

And other Narratives of the Operations

EDITED BY

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NOTE

THE publication of Sir Roger Keyes's Dispatches of May 9 and June 15, 1918, at length affords an authentic record, by its organizer and leader, of an achievement which a French Admiral has characterized as 'the finest feat of arms in the naval history of all times and all countries'. As a story of pure gallantry, it may be, the Dispatches do not add to the information already accessible. But they correct many glaring current inaccuracies, based on irresponsible statements and incomplete knowledge.

Above all, they present us for the first time with an authentic exposition of the purpose and tactics of the operations, and permit us to view their incidents in proper perspective. For the first time, too, we realize the magnitude of the design, its colossal intricacy, its patient weaving.

Narratives of both Raids were issued through the Press Bureau on April 26 and May 15, 1918. Having regard to their medium of publication, but on that ground alone, these articles, written by an exceedingly competent and well-informed journalist, may be described as official. There has also found its way into the public press an unusual amount of first-hand information in the form of interviews with actors in the events. Much of it is unreliable, as statements hot upon the event generally are. But there remains a residuum which is valuable and worthy of recovery.

These materials have been explored and sifted here, by no means because they supplement the Dispatches on any material point, but because they exhaust the sources at present available for the record of deeds of which we would not lose the minutest detail.

I am indebted to *The Times* for permission to reproduce the plans on pp. 40 and 100; to the Editor of the *Daily Mail* for use of that on p. 8. The frontispiece is copyright of the *Graphic*. It will be understood that the photographs which illustrate the text of the Dispatches are not part of the official document.

C. S. T.

King's College,
Old Aberdeen.

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ERRATA

Page 87, n. 8 : *for* Dover *read* the Swin
Page 89, n. 2, l. 6 : *for* clear the Mole *read* close the Mole

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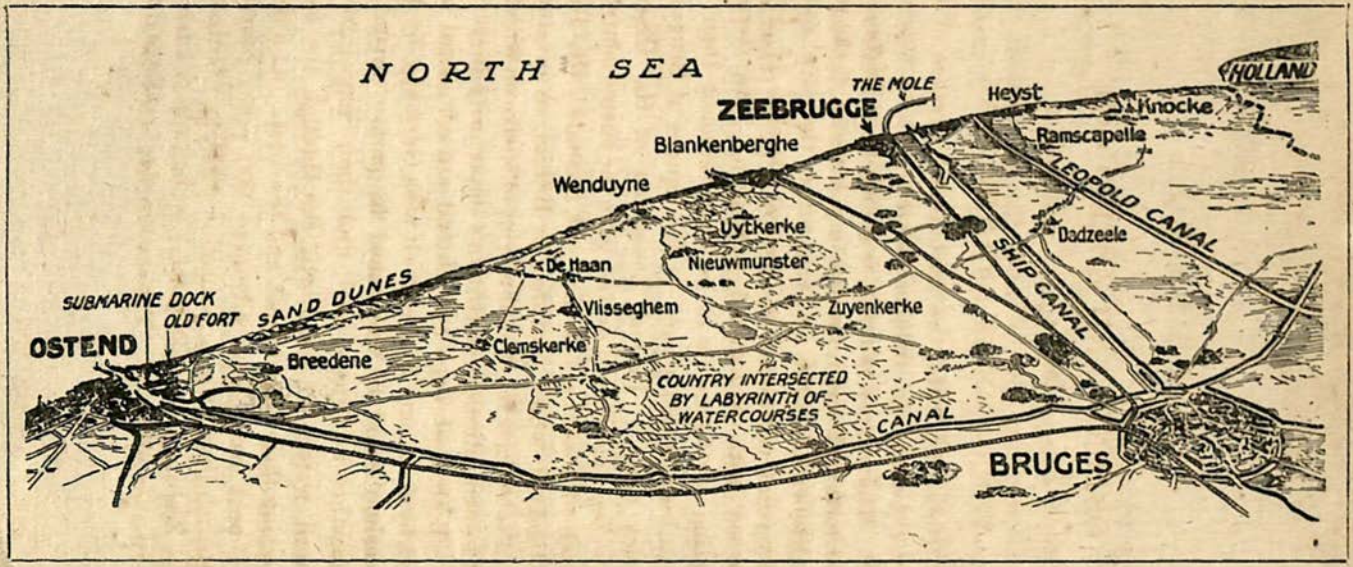


THE OSTEND—BRUGES—ZEEBRUGGE CANAL SYSTEM

OSTEND AND ZEEBRUGGE

I

THE OCCASION AND THE PLAN

On October 13, 1914, the unstemmed advance of the Germans forced the Belgian Government to evacuate Ostend. The enemy, already established in Zeebrugge, entered forthwith and remained in possession of the port until October 17, 1918. 'From either the naval or the military point of view,' *The Times* of October 17, 1914, announced with ill-founded optimism, 'the German occupation of Ostend is of no more account than the German band which played in the square at Bruges on Thursday night.' In fact, possession of the Ostend–Bruges–Zeebrugge canal system gave the enemy control of a stretch of coast outside his 'wet triangle', the Bight of Heligoland, which provided, in Bruges, an invaluable and protected base for the submarine offensive on which he relied to neutralize Great Britain's superiority in surface craft. Both Zeebrugge and Ostend are connected with Bruges by canal, and Bruges itself with Germany by rail. Submarines could be dispatched in parts overland, be put together at Bruges, and find their way into the southern waters of the North Sea through the canals connecting their inland dépôt and the coast. At a bound the U-boat bases were advanced 300 miles nearer to the British lines of communication with the Continent.

The Zeebrugge–Bruges–Ostend system forms a triangle with two sea entrances. The eastern side is the canal from

Zeebrugge to Bruges, and is eight miles long. The southern side, the smaller canals from Bruges to Ostend, is eleven miles long. The base, facing north-west, is the twelve miles of strongly fortified coast between Ostend and Zeebrugge.[1]

No time was lost by Germany in developing her acquisition. Artillery of heavy calibre was mounted on the coast between Nieuport and the Dutch frontier. Between Zeebrugge and Ostend alone at least 120 big guns were concentrated, in addition to batteries of smaller ordnance for dealing with inshore raids.[2] As Lord Jellicoe remarked in August 1917, the Germans applied to this length of sand-fringed coast the principle of intensive fortification already adopted higher up the North Sea and on the island of Heligoland, and studded it with heavy pieces, in themselves infinitesimal targets at a range of more than 20,000 yards, on which a bombardment needed to be carried out.[3] That ships cannot engage land forts successfully is an axiom of naval warfare; the fortified Ostend–Bruges–Zeebrugge system rested seemingly secure behind the disqualification. While the ports served as lairs for destroyers and submarines, the country behind them was soon planted with aerodromes, whence with facility London and other cities became targets for German aircraft. Britain's insularity was doubly challenged.

Of the two ports Zeebrugge offered the greater utility to the enemy. It was more distant from challenging

[1] Sir Roger Keyes's Dispatch of May 9, General Summary, para. 4.

[2] Percival Hislam, *How we Twisted the Dragon's Tail* (1918), p. 35.

[3] Between the Dutch frontier and the German right flank fronting Nieuport 225 guns were in position, 136 of which were of from 6-inch to 15-inch calibre. The latter ranged up to 42,000 yards (21 miles).—Sir Roger Keyes's Dispatch of May 9, General Summary, para. 4.

Patrols on the Thames estuary and at Dunkirk, more difficult to approach, and, by reason of its protecting Mole, more difficult to attack. Its canal permitted the passage of destroyers and submarines of greater draught from Bruges to the sea. The Germans therefore concentrated their chief care upon it, equipped it with seaplane sheds, ammunition and store dépôts, floating docks and armoured shelters for submarines, and made it the principal outlet for their submarine, surface, and aerial operations in the lower waters of the North Sea. Ostend, on the other hand, lacking the protection of a defensive Mole, lying within range of the 15-inch batteries of the Royal Marine Artillery in Flanders, and connected with Bruges by canals inadequate to carry vessels of heavy draught, was subsidiary to its eastern neighbour. Originally a destroyer and submarine base, continuous bombardment caused the enemy to transfer its plant, docks (except one), &c., to Bruges. Ostend remained merely an emergency harbour for mosquito craft in difficulties.

While the Germans employed their ports at Kiel and in the Bight—Wilhelmshaven, Emden, Bremerhaven, Brunsbüttel, and Heligoland itself—as the bases for their Atlantic and distant operations, they proceeded to equip the Flemish ports expeditiously for a more localized service. Before the end of October 1914 Antwerp's shipbuilding yards were appropriated and skilled German workmen were introduced. Sections of small submarines dispatched by rail were assembled there, the completed vessels passing by canal to Bruges. By the end of November, six weeks after the occupation of Ostend, Zeebrugge had become an effective base of operations. In the same period surface torpedo-craft or outpost-vessels, small and of indifferent quality, were built at Antwerp and sent

through the canals to the coast. Two of them—A2 and A6—were sunk at sea by British destroyers on May 1, 1915. More powerful craft soon began to operate from the Belgian ports. Vessels of 1,000 tons displacement and 35 knots speed armed with three 4·1-inch guns made their appearance,[1] and on the night of October 26, 1916, ten German destroyers penetrated into the Channel for the first time, sank the empty transport *Queen* and the destroyer *Nubian* and disabled the destroyer *Flirt*. In April 1918 Bruges provided a base for at least thirty-five torpedo craft and about thirty submarines.[2]

Standing, as they did, in dangerous proximity to our vital communications, military and economic, it became a matter of urgency either to recover the Belgian ports from the enemy or to prevent his intensive fortification of them. Rear-Admiral the Hon. Horace Hood, who was sent to Dover in October 1914 to organize a naval force as a prolongation of the retreating left wing of the Allies in Flanders, was not provided with the equipment for an adequate offensive. His successor, Vice-Admiral Sir Reginald Bacon, who succeeded him in command of the Dover Patrol in April 1915, also was limited to exclusively naval materials and to attempting by intermittent bombardments results unattainable completely by their means.

Theory and experience alike prescribed that, to achieve success, naval and military power should co-operate on such an enterprise as the reduction of the Belgian ports.[3]

[1] Percival Hislam, *How we Twisted the Dragon's Tail* (1918), pp. 14, 23.

[2] Sir Roger Keyes's Dispatch of May 9, General Summary, para. 5.

[3] On this topic see Mr. Archibald Hurd's article, 'Zeebrugge and Ostend—and After', in the *Fortnightly Review* for June 1918.

Admiral Togo's failure to block Port Arthur and place the Russian Fleet out of action in February–May 1904 provided a classic example of the axiom. But in and after 1914 the military situation made a co-operative expedition impossible. On the earliest stroke of war the British Army, 'contemptible' in numbers but indomitable in efficiency and bearing, was called on to participate in the defence of France's soil against the invader. The interests of the whole Alliance, and not merely France herself, demanded that the industrial areas of France and Belgium and their populations should be rescued from the enemy before the battle-line settled down to equilibrium. At the same time Britain was deeply pledged to protect Belgium and her neutrality. To regain her lost seaports was not less an urgent duty because it was prescribed imperatively by our own maritime interests. But the military forces the operation called for were needed elsewhere. In 1915, in addition to the Western front, Egypt, Gallipoli, and Mesopotamia made heavy calls upon the British armies. In 1916 Germany's formidable but fruitless attacks upon Verdun pinned them to the Somme and the Ancre. The Russian Revolution, which began in March 1917 and preluded the collapse of our Eastern ally, set free a vast number of German and Austrian troops, and threatened to give the Central Powers at length a decision on the Western front. If plans for a joint operation against the Belgian ports were formed, they were perforce abandoned. It behoved the Navy to act alone.

The need for action was intensified by Germany's inauguration of unrestricted submarine warfare on February 1, 1917. Its heavy toll upon British, Allied, and neutral shipping, from its inception until the eve of the

Zeebrugge–Ostend operations in April 1918, is exhibited in the following Table.[1]

Period.	Total.	
	Month.	*Quarter.*
1917		
February	574,856	
March	634,685	1,209,541
April	893,877	
May	630,336	
June	712,721	2,236,934
July	575,949	
August	549,363	
September	369,161	1,494,473
October	487,337	
November	333,443	
December	452,063	1,272,843
1918		
January	354,715	
February	388,542	
March	399,473	1,142,730

Dissatisfaction with the Admiralty grew as the need for more adventurous methods of combating the submarines was suspected. In November 1916 Admiral Sir John Jellicoe was summoned from the command of the Grand Fleet to succeed Admiral Sir Henry Jackson as First Sea Lord. The Naval War Staff was invigorated by the influx of younger officers with war experience, and towards the end of 1917 an inter-Allied Naval Council was formed for the 'co-ordination of effort at sea as well as the development of all scientific operations connected with the conduct of the war'. The

[1] See *The Times*, April 25 and May 23, 1918. The Table gives the gross tonnage of losses in the mercantile marine by mine and submarine.

adhesion of the United States to the Allied cause made a considerable accession of force available for naval operations and encouraged a more energetic prosecution of offensive warfare.

In November 1916 a proposal, made by Rear-Admiral Tyrwhitt, for the blocking of Zeebrugge was rejected by the Board. But twelve months later the Plans Division, of which Rear-Admiral Roger Keyes was the first Director, had under consideration the blocking of both the Belgian ports. In November 1917 a plan of attack was prepared and reported to the First Sea Lord early in December. The objections which had overruled the proposal in 1916 were, firstly, the risk involved to the personnel; secondly, the contention that it was foolish to block ports into whose occupation we might ourselves hope to enter later. To the former it could be answered that the sacrifice involved in the operation was not greater than that incurred normally by the land forces of the Crown. As to the second, it was hardly doubtful that, whenever and by whatever agency he was ejected from them, the enemy would block and destroy the ports before evacuation. To leave him undisturbed in their possession until he saw fit to render them useless was a counsel of despair. These arguments prevailed, and, after Lord Jellicoe left the Admiralty (December 24), a conclusive decision was taken to put the scheme of the Plans Division into execution.

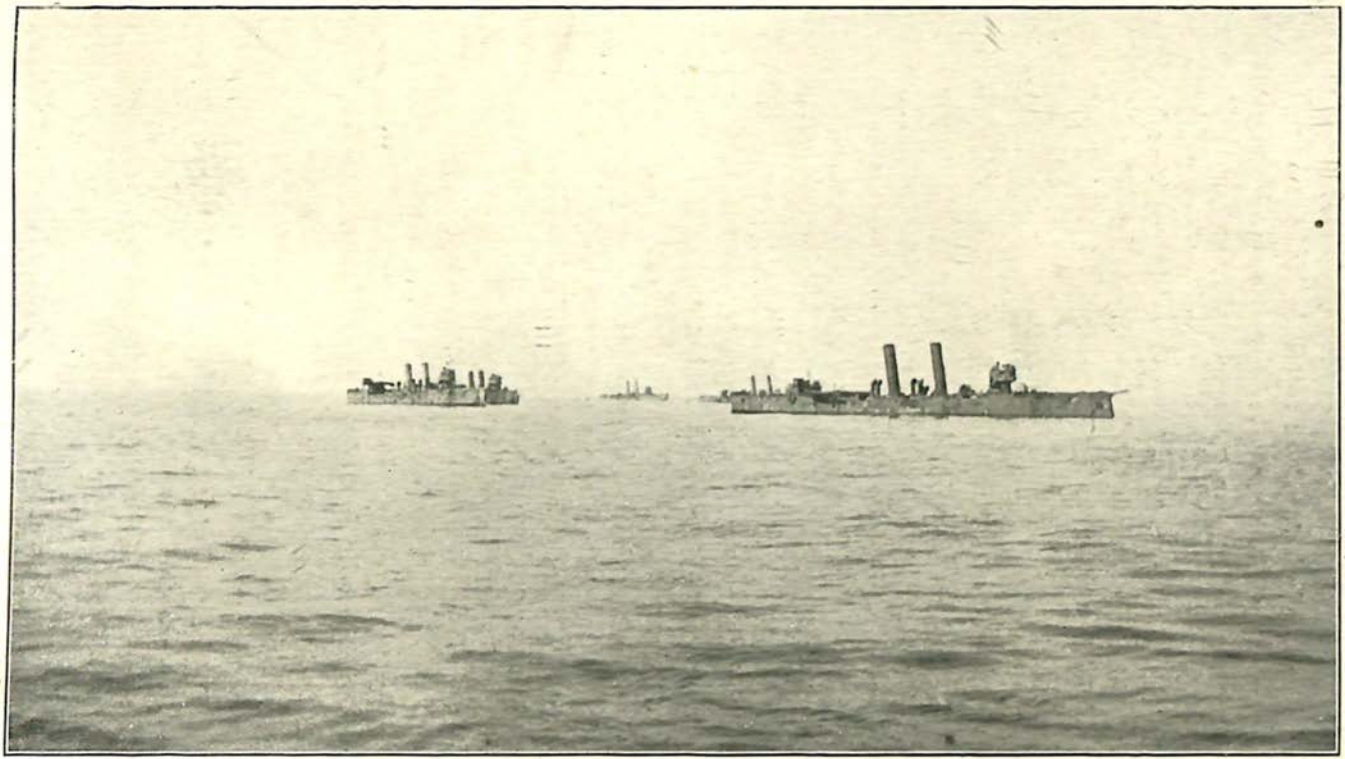
Rear-Admiral Keyes, as Chief of Staff in the Eastern Mediterranean Squadron in 1915, had been chiefly responsible for co-ordinating naval and military effort in the Gallipoli undertaking. It was doubly fitting, therefore, that on January 1, 1918, he should succeed Vice-Admiral Bacon in command (acting Vice-Admiral) of the Dover Patrol, commissioned to execute his own daring project. He proceeded at once to get together a staff

to work out its details, to prepare the material, train the personnel, and fit out the ships the operation required.[1]

The difficult problem for solution was, how to block Zeebrugge and Ostend, the doors of Germany's Belgian submarine system, without the co-operation of land forces, and with regard to the fact that each port had been converted into an exceedingly powerful fortress. It is a naval axiom that ships cannot successfully attack land forts: the ship, visible itself, fights an invisible target, and provides an unsteady platform for howitzers, to whose plunging fire land forts are particularly vulnerable. Nevertheless Admiral Keyes proposed simultaneously to block two harbours defended by batteries of the heaviest calibre. Other obstacles were hardly less formidable. Among them was the difficulty of access. The Belgian coast is dangerous, beset by shoals, its navigation treacherous. Yet it was imperative to handicap the enemy's batteries by approaching them under cover of darkness, deprived of lights, marks, and beacons. The risks were great; any deviation from the proper course could not fail to lead to disaster. There was the hazard of mines, submarines, surface attack, and the risk of unfavourable weather conditions arising at a moment when it was too late to withdraw.[2] Moreover, as seven hours' steaming at ten knots was required to bring the forces from their rendezvous of concentration to Ostend and Zeebrugge, sixty-three miles distant, at least four hours of daylight had to be encountered, during which

[1] Among the officers killed on April 23 were many who shared with Sir Roger Keyes the secrets of the plan and the burden of its preparation. See their names in his Dispatch of May 9, General Summary, para. 30.

[2] See an article by Mr. L. Cope Cornford, 'A Great Feat of Arms', in the *National Review* for June 1918, p. 502.



BLOCK-SHIPS JOINING VICE-ADMIRAL'S FLAG OFF GOODWIN SANDS

enemy observation might detect and circumvent the operations.[1]

In solving the problem, how to get the blocking ships into effective position, Sir Roger Keyes established a new precedent in naval tactics. Zeebrugge and Ostend canals being comparatively narrow, there was a good prospect of blocking them if the ships could be taken in. At Zeebrugge, on April 23, the intention was realized, one of the sunken ships touching both banks of the canal channel, and the other so nearly achieving that result as to make it difficult to dredge on the open side without damaging the bank. At Ostend, on May 10, the prospect was not realized only because *Vindictive* was unable to fulfil completely the plans laid down for her.[2]

To sink a ship in the exact position marked out for her is a difficult operation. Unless the vessel sinks on an even keel, that end of her which drops first is carried down stream while the other end projects from the surface. Hence, instead of sinking athwart the channel, the vessel inevitably will lie along it, her width and not her length presenting an obstruction. The difficulty can be overcome by anchoring stem and stern before opening the main inlet valve. But at Zeebrugge and Ostend so slow a process was impracticable. Nor, in view of the strong current, could it promise to be effectual. The alternative was to secure that the ship should sink on an even keel by blowing out her bottom from end to end. To the efficiency of the device to secure that result the

[1] Sir Roger Keyes's Dispatch of May 9, General Summary, para. 15.

[2] The statement, that *Vindictive's* failure was due to her draught being too large for the channel, is not accurate. The true reason is revealed in Sir Roger Keyes's Dispatch of June 15, para. 11.

success of the Zeebrugge adventure is in great measure attributable.[1]

The scheme established another innovation in naval warfare. It proposed to blind the enemy's heavy batteries by the use of a thick fog-screen, under cover of which the block-ships could approach their objectives. The employment of a smoke-screen was not a novelty in naval warfare. Von Hipper used it for the first time in the Dogger Bank action on January 24, 1915. The German High Sea Fleet used it in the later stages of the Battle of Jutland on May 31, 1916, to escape from Sir John Jellicoe's superior Battle Fleet. It was also in general use as a protective device against the attacks of under-water craft. But as cover for an offensive its employment was a novelty devised by Wing-Commander Brock, R.N.A.S., 'a high development of the scientific use of smoke or fog—it is more fog than smoke—so as to protect the operation from batteries which could have flanked it'[2] and sunk the block-ships while still distant.

At both Zeebrugge and Ostend, and particularly the former, the plan of assault involved the intricate combination of various classes of naval units and called for the concurrence of favourable physical conditions. No less than seventy-five vessels were engaged in the raid on Zeebrugge and over sixty in the simultaneous attack on Ostend on April 23, the success of the operation

[1] I follow here an exceedingly informing article, 'The Raids on Zeebrugge and Ostend', by Staff-Paymaster Cyril Cox, R.N.V.R., in the *Nineteenth Century and After* for June 1918. His conclusions are supported by a valuable array of historical examples. The block-ships carried on their bottoms mines fired by a time-fuse.

[2] The quotation is from the speech of the First Lord to the House of Commons on April 24 announcing the Raid and its success. See Dispatch of May 9, para. 37.

depending absolutely upon their nicest attention to a prearranged time-table—motor craft ahead to lay the fog-screen; vessels carrying landing- and demolition-parties to clear the Mole in advance of the block-ships; a submarine assault upon the viaduct to prevent reinforcement of the German parties on the Mole; destroyers in attendance upon monitors and in-shore ships to ensure them against attack from the sea; the block-ships themselves, the centre of this elaborate machinery; motor craft to take off the crews of the sunken vessels and to deal with enemy destroyers in the harbour; and off the Dutch coast, one hundred miles to the northward, a portion of the Harwich Force, under Sir Reginald Tyrwhitt, to hold at bay any intruders from enemy bases in Heligoland Bight; monitors and their 15-inch guns to engage the shore batteries; and overhead the aeroplanes—an extraordinarily complex mechanism whose efficiency depended upon each unit's meticulous fulfilment of its appointed part in the scheme.

While it was requisite that the operation should be nicely timed to take advantage of high tide, and yet avoid being caught by morning light, it was equally imperative, since the distance to be travelled on April 22–3 was about 100 miles each way,[1] that the sea should be calm for the small craft. Also an on-shore wind was necessary to carry the covering fog-screen before the advancing vessels. Absence of fog was essential; a haze would be beneficial. These desiderata postulated a concurrence of favourable conditions. Even on April 23, at the third attempt to execute the plan, they were not all present; high visibility and, at the eleventh hour,

[1] The point of assembling or concentration, as has been stated already, was 63 miles from the Belgian ports. From Dover the distance is as stated above.

a change of wind threatened to jeopardize the scheme and rob it of success. On the other hand, better conditions had not occurred since the preparations were completed, nor did they recur within the period in which the operations were practicable.[1]

The project was both desperate and unique. 'Attacks on territory by the fleet alone,' declares a high naval authority,[2] 'except by way of set bombardments for merely punitive or destructive purposes, are not now, any more than they were two hundred years ago, the proper objects for a navy alone to carry out.' 'Whatever place in the pages of history may eventually be accorded to the naval raids on Zeebrugge and Ostend,' writes Staff-Paymaster Cyril Cox, R.N.V.R.,[3] 'it is certain that no adequate parallel to them can be found in the records of our own or any other Navy.' Various incidents have been recalled, but they accentuate characteristics that make the Raid of St. George's Day unique rather than furnish precedents for its ingenuity and daring.

In 1794 a combined expedition under Vice-Admiral Sir John Jervis and General Sir Charles Grey attacked Martinique, whose possession of the best harbour in the eastern Caribbean Sea made its acquisition desirable. As in the raid on Zeebrugge, the harbour was protected by a sheltering sea-wall. Otherwise, apart from the dare-devil courage which marked both operations, there is little in common between them. H.M.S. *Asia* failed to breach the sea-wall inside the harbour and open a way to a party of bluejackets waiting outside in the bay to

[1] Sir Roger Keyes's Dispatch of May 9, General Summary, para. 16, 18.

[2] Admiral P. H. Colomb, quoted in *Fortnightly Review*, June 1918, p. 882.

[3] *Nineteenth Century and After*, June 1918, p. 1198.

storm the citadel. Thereupon Captain Robert Faulknor, of the sloop *Zebra*, laid his ship alongside the sea-wall, scaled the parapet, and stormed the citadel.[1] Two years later (1796) Captain Drury proposed to bottle up the Dutch fleet inside the Zuider Zee and put an end to its depredations upon British shipping. He planned to carry the batteries commanding the channel by means of landing parties, and, having opened it to the Fleet, to block the Texel with sunken Dutch merchantmen, re-embarking the landing parties when the Fleet had done its work.[2] Save that the block-ships were to be provided from enemy vessels within the channel the project is not remote in conception from the Zeebrugge design. It was rejected by Admiral Duncan, and the fact emphasizes the boldness and confidence of the Admiralty in sanctioning at Zeebrugge a vastly more formidable risk. Three years later occurred the cutting out of *Hermione*. An act of mutiny had placed the ship in Spanish hands two years before, in October 1799, she was discovered in the harbour of Puerto Cabello by Captain Edward Hamilton of H.M.S. *Surprise*. He resolved to cut her out from under the shore batteries. Sending six boats into the harbour under cover of darkness, he boarded *Hermione*, overpowered her crew, and in spite of a hot fire carried her out of the harbour. There are details of similarity to the Zeebrugge Raid, but as a deed of daring Captain Hamilton's achievement cannot rank with it.[3] Fitter to be associated with it is the expedition to Ostend under Captain Home Riggs Popham, R.N., in May 1798, which achieved the destruction of the canal gates. The landing

[1] *Nineteenth Century and After*, June 1918, p. 1199.
[2] *Ibid.*, p. 1202.
[3] *Ibid.*, p. 1198.

parties, however, unable to re-embark, were forced to surrender.[1]

Recent history provides other episodes, among which the effort of Naval Constructor R. P. Hobson to sink the collier *Merrimac* in the fairway of the harbour of Santiago de Cuba is most familiar. The attempt was made on June 3, 1898. The Spanish Fleet under Admiral Cervera lay within the harbour. Admiral Sampson and the American Fleet waited outside. Under heavy fire Hobson succeeded in taking *Merrimac* into the harbour and sank her; but the harbour was not blocked, and the American Army eventually delivered the Spanish Fleet into Sampson's hands by capturing Santiago and forcing Cervera out to sea.[2] Equally indicative of the disadvantages under which naval power lies in an unsupported challenge to a defended enemy port is the familiar effort of Admiral Togo to destroy the Russian Fleet in Port Arthur in February–May 1904. Three attempts were made by the Japanese to block a channel too wide to be closed by a single ship. At the first attempt (February 23–4) three of the five ships sent in were sunk by Russian fire before they reached the harbour entrance; the other two sank themselves, but at some distance from the channel. A month later (March 26–7) the Japanese sank four ships, but ineffectually; the Russian Fleet came out to assert its continued liberty. Five weeks later (May 2–3) twelve ships were requisitioned for blocking purposes and eight of them were sunk; but the harbour was not effectually sealed. The circumstances demonstrate the destructive power of well-placed land batteries trained upon blocking-ships in

[1] See the *Journal of the United Service Institute*, Nov. 1918, for an account of Popham's operations.

[2] *Fortnightly Review*, June 1918, p. 880; *Nineteenth Century*, June 1918, p. 1203.

a narrow channel. In sea-power the Japanese were superior to the Russians. Yet their unsupported naval measures failed to put the Russian Fleet out of action.[1]

The sinking of the collier *Newbridge* in the Suninga Channel of the Rufigi River in November 1914 was a small affair, but it illustrates the difficulties to be overcome in blocking a channel. The German cruiser *Königsberg* having been located there, it was resolved to close the river against her egress. Escorted by a small flotilla of ships' steamboats, *Newbridge* steamed to the spot where it was decided to sink her, anchors were dropped at head and stern, the main valve was opened, and she began to settle. The crew stepped off into a waiting steam-cutter, fired the explosive charge, and withdrew.[2]

A review of these imperfect parallels heightens appreciation of the Zeebrugge adventure as a superb effort of human courage. Had it failed the story of the nation still would have been richer for a great tradition. In fact, overcoming impediments of many kinds that threatened failure, it won triumph for a project audaciously conceived. Luck attended it, and deservedly. A plan so laboriously prepared, whose details in the last stages were shared by so many actors in it, might have leaked out. The necessary factor of surprise might have been sacrificed, and the enemy have been prepared to effect the destruction of the expedition before it reached

[1] *Nineteenth Century*, p. 1205; *Fortnightly Review*, p. 831.

[2] *Nineteenth Century*, p. 1200. Staff-Paymaster Cox remarks, as proving how difficult is the operation, that the Turks on several occasions tried to block the Shatt-al-Arab and Tigris to prevent our naval advance in Mesopotamia. Not once were they successful. The Germans were equally unsuccessful in their efforts to block the Cameroon River against our passage to Duala in the early stages of the West African campaign.

its destination. A single scouting sea-plane or patrol boat would have deprived the adventure of the first condition of success. Neither was encountered. More serious still, a mine-field laid in an unexpected area might have destroyed the vessels before their task was accomplished. No foresight could prevent these contingencies from happening. They were challenged in a spirit of buoyant optimism, with a love of adventure for adventure's sake, that priceless disposition of the race, and with unswerving confidence in the mind that conceived and the hands that guided the operation.

II

ST. GEORGE'S DAY RAID, APRIL 23, 1918

By the beginning of April the projected attack on Zeebrugge and Ostend was planned to the last detail. The special ships the service demanded had been assembled and fitted at Chatham. Volunteer crews had been selected and trained for the particular operations in which they were to take part. To block the Zeebrugge section of the Bruges Ship Canal was the chief object. The concurrent closure of Ostend seemed necessary to complete the sealing-up of the waterways radiating from Bruges. Otherwise, lighter craft, denied an exit *via* Zeebrugge, would pass more or less freely through the smaller channels that debouch on the sea at Ostend. A subordinate, but important, purpose was to inflict as much damage as possible on the harbour works and defences of the two ports. If successful, the operation promised to set back the enemy's submarine bases three hundred miles, which roughly is the distance from Zeebrugge to Emden, to seal-up his torpedo craft at Bruges, to free the Dover Patrol for service in the wider anti-submarine campaign, and to relieve our military and economic communications of an intolerable menace.[1]

The forces to which the operation was entrusted consisted of monitors armed with heavy guns to tackle the

[1] See Sir Roger Keyes's Dispatch of May 9, General Summary, para. 3, 6-9. Also an article, 'Zeebrügge', by Mr. A. H. Pollen, in *Land and Water*, May 2, 1918, and his *The Navy in Battle* (1918), chap. 25.

shore batteries; destroyers to provide a protecting cover to the ships detailed for the attacking operations; motor boats and launches to lay the smoke-screens, rescue the crews of the block-ships, and engage enemy destroyers and other craft that might be found in the harbours; five obsolescent light cruisers for use as block-ships, filled with cement and fitted with explosive charges and mines attached to their bottoms; a sixth light cruiser, H.M.S. *Vindictive*, two Mersey ferry-boats, *Daffodil* and *Iris II*, and two obsolescent submarines, all detailed to attack the Mole at Zeebrugge and divert attention from the block-ships, the sinking of which in their appointed places was the main object to be achieved. The expedition, which numbered over one hundred and forty vessels of all kinds, was under the command of Vice-Admiral Roger Keyes in H.M.S. destroyer *Warwick*.[1] Commodore Hubert Lynes directed the operations at Ostend. The Harwich Force, under Sir Reginald Tyrwhitt, co-operated off the coast of Holland in order to watch any movement by the enemy from the direction of Heligoland Bight. The Dover Wings of the Air Force and the guns of the Royal Marine Artillery in Flanders were warned to bombard the shore batteries, in order to obstruct their concentration on the block-ships. On several nights prior to April 22 a bombardment had been carried out. Consequently the enemy had no reason to anticipate particular action on the night of the operation.[2]

There being two points of attack, the operation resolved

[1] The numerous small craft detailed for the Ostend Raid were based on Dunkirk. The block-ships *Sirius* and *Brilliant* and two attendant destroyers alone made the passage from Dover with the Zeebrugge force.

[2] Dispatch of May 9, General Summary, para. 20.

itself into two distinct and simultaneous undertakings, the expedition breaking up into unequal portions to carry them out. In both cases the element of surprise was essential to success. Concealment was to be secured by smoke-screens laid by the small motor-craft steaming ahead. A daring rush into the teeth of the shore batteries, distracted by bombardment from sea and air, was relied on to carry the concrete-laden cruisers to their blocking positions within the canals.

At Ostend the operation was at once more simple and more difficult. No protecting Mole covered the approach to the canal entrance, as at Zeebrugge. The problem was simply to run in *Sirius* and *Brilliant* from under the smoke-cover and place them between the harbour piers before the enemy could sink them elsewhere. The operation failed, partly through a change of wind at the last moment, chiefly because the enemy had previously shifted the Stroom Bank buoy marking the channel to the harbour a mile to the eastward. The concrete-laden cruisers, picking up the false guide, and putting their helms to starboard, consequently ran ashore.[1]

At Zeebrugge the operation was complicated by the problem of the Mole on the west side of the harbour—that is, on the starboard side of the block-ships as they steamed towards the canal gates. The structure—used by the Germans as a supply, air, and destroyer base—is one and a half miles long by 100 yards wide. A battery of three 5·9's, and six smaller guns on the extension, guarded the entrance. Five hundred yards of viaduct connect the Mole with the shore,[2] on which other batteries were planted for its protection. At Zeebrugge,

[1] Sir Roger Keyes's Dispatch of May 9, General Summary, para. 26.

[2] The necessity to counteract the silting of the harbour explains

consequently, the block-ships were threatened both by shore batteries, as at Ostend, and also by the Mole batteries and machine-guns. It was especially necessary to put the battery at the sea end of the Mole out of action before the block-ships—*Thetis*, *Intrepid*, and *Iphigenia*—entered the harbour.[1] The task was entrusted to landing parties carried by the old cruiser *Vindictive* and the two ferry-boats *Iris* and *Daffodil*. To cut off the Germans on the Mole from reinforcement two submarines were detailed to blow up the iron viaduct connecting it with the shore. The submarine attack was entirely successful. *Vindictive* imperfectly fulfilled her commission. But without serious molestation from the Mole's defences the block-ships were able to steam the last mile of the course. Two of them—*Intrepid* and *Iphigenia*—sank themselves in the fairway of the canal and effectually bottled it up. Motor-launches rescued their heroic crews. The ferry-boats *Iris* and *Daffodil*, being of large carrying capacity, double hulled, and practically unsinkable, were provided chiefly for the rescue of the landing parties in the event of *Vindictive* being sunk.[2] A counter-attack by the powerful Destroyer Flotilla inside the harbour was anticipated. In fact the greater part of it had been withdrawn to Bruges. One destroyer emerged and is believed to have been torpedoed by a C.M.B. Others remained alongside the Mole and their crews took part in its defence.[3]

As has been remarked already, so complex a scheme

why the Mole is broken by a viaduct which opens it to the sea for 500 yards.

[1] The attack on the Mole, conducted on such a scale as to suggest that it was the main operation, was shrewdly planned to conceal and also promote the real object of the expedition.

[2] *Iris II* and *Daffodil* also carried landing parties.

[3] Dispatch of May 9, General Summary, para. 10.

demanded the concurrence of favourable conditions of weather and atmosphere. Throughout April the crews of the block-ships, lying in the West Swin anchorage, debarred from communication with the shore, waited eagerly for their arrival. Twice the whole Armada concentrated at sea, and once, on April 11–12, got to thirteen miles from Zeebrugge, when weather conditions compelled it to return.[1] At length, on April 22, St. George's Eve, satisfactory conditions invited a third venture.

The considerable Armada converged upon the scene of action from four points.[2] A covering force of light cruisers and destroyers operated from Harwich towards the Dutch coast. In the West Swin, the main channel from the Nore to the north, the five block-ships, with *Vindictive*, *Daffodil*, and *Iris II*, awaited the summons. At Dunkirk the monitors (six), destroyers, M.L.s and C.M.B.s—in all forty-seven vessels, including nine French M.L.s and T.B.D.s—part of the force detailed for the Ostend operations, were assembled. At Dover the rest of the force was concentrated.

At 1.10 p.m. the Swin ships, and at 2.0 p.m. the Dover contingent, proceeded to join Sir Roger Keyes off the Goodwin Sands, and thence to a rendezvous 63 miles from their objectives; the speed was 10 knots, for the pace of the block-ships was slow. At 4.53 p.m. the force set out from

[1] Of the two occasions mentioned in the text, once the weather compelled abandonment of the operation within an hour. See an interesting article by Lieut.-Commander E. Hilton Young, R.N.V.R., in the *Cornhill Magazine* for December 1918. The author was a Lieutenant R.N.V.R. on *Vindictive* on April 23. See the Dispatch of May 9, General Summary, para. 18.

[2] See Dispatch of May 9, para. 45 ff. Excluding the Harwich covering force (23 ships) and the parent ships (3) the striking force numbered 142 vessels (see Dispatch, para. 31). Of these, 75 were engaged at Zeebrugge and 67 at Ostend.

the rendezvous for its destination. It was disposed in three columns, *Warwick*, *Phoebe*, and *North Star*, detailed to cover *Vindictive* from torpedo attacks while the storming operations were in progress, forming the starboard column. Every craft was towing one or more C.M.B.s, and M.L.s steamed between the columns.[1] The Ostend force proceeded thither from Dunkirk under the orders of Commodore Lynes.

The greater part of the passage of the main force having to be carried out in broad daylight, all the scouting planes of the Patrol were employed to detect the appearance of enemy craft. As the normal means of communication might put him on guard, the movements of the scattered forces were governed by a time-table, which was observed with extraordinary punctuality. Visual signals were reduced to the minimum of necessity; wireless signals (with one exception) were forbidden. Special aids to navigation were laid down in advance to guide the attacking force and the monitors to their positions. On arrival at a certain position, the conditions continuing to be favourable, a prearranged wireless message was sent (8.45 p.m.) to the detached divisions in the north and at Dunkirk signifying that the programme would be

[1] 'It was a brave and unusual array that swept to the north-east as the light faded from the sky. Modern destroyers steamed on the wings of the columns, one of which flew the flag of Vice-Admiral Roger Keyes, C.B., C.M.G., D.S.O., M.V.O., the old *Vindictive* in the van of the centre column with the *Iris* and *Daffodil* in tow, for all the world like veteran hound on the trail with her two puppies on her flanks; the five valiant block-ships followed, each with specially detailed parties below stoking for all they were worth, that their old ships' last voyage should be made at a seemly speed. A cloud of motor-launches filled the waterways between the columns, and the two obsolete submarines, with their escorting picket-boat, proceeded in tow of destroyers.'—*The Navy Eternal* (1918), by 'Bartimeus', p. 294.

adhered to. Fifteen miles or so from its objectives, the main force stopped at 9.55 p.m. to enable the surplus crews to be disembarked on to an attendant mine-sweeper, and to slip the C.M.B.s. At 10.30 p.m. *Sirius* and *Brilliant* and their escort of two destroyers proceeded towards Ostend. The rest went on to Zeebrugge.

The striking units detailed for the attack on Zeebrugge[1] were the three block-ships, *Vindictive* and her attendant ferry-boats, submarines C 1 and C 3, a flotilla of twenty-four M.L.s and eight C.M.B.s for laying smoke screens and rescue work, and nine C.M.B.s to attack vessels inside the Mole. Two monitors were stationed out to sea for long-range bombardment, but, owing to poor visibility and an unusual set of the tide, its opening was delayed somewhat beyond the time prescribed in the programme of operations.[2] At 11.20 p.m. the monitors opened fire. At 11.40 p.m. the C.M.B.s, running in close, set up the necessary 'fog' and came under heavy fire during the operation. Almost simultaneously the wind died away, and, coming again from a southerly direction, lessened the effectiveness of the smoke-screen. At 11.56 p.m. *Vindictive*, with *Daffodil* and *Iris II* in her rear, passed through the 'fog' and found the end of the Mole's giant structure 300 yards distant on the port bow. At 12.1 a.m., one minute beyond her programme time, she was alongside. Three minutes elapsed before *Daffodil* arrived and pushed *Vindictive* to the Mole to enable the special anchors to hook the parapet. The heavy roll caused by a three-knot tide, and the scend alongside the Mole, prevented the ship from placing them and broke up the foremost of them. Most of the landing brows were broken by gun-fire. The two foremost, however, reached the wall, and two others eventually were got

[1] Dispatch of May 9, para. 56 ff

[2] *Ibid.*, para. 53.

into position. The storming and demolition parties poured over them and began a valiant assault upon the Mole's garrison and defences which is detailed elsewhere.[1]

Daffodil arrived at 12.4 a.m., and throughout the operations was obliged to drive her stern against *Vindictive's* starboard side to hold her to the Mole. *Iris II* followed close and took station ahead of *Vindictive*. In her case also the scend of the sea and roll of the ship made it impossible to fasten the Mole anchors. *Iris* fell back behind *Vindictive*, and prepared to land her parties across the cruiser, but hardly had begun to do so when the withdrawal signal was sounded.

The programme allowed twenty-five minutes for carrying through the attack upon the battery of three 5·9-inch guns at the seaward end of the Mole, and for isolating the Mole from reinforcements by the destruction of the Viaduct. The latter task was achieved completely, the former imperfectly. Meanwhile, at 12.25 a.m., *Thetis*, leading the other two block-ships, passed the end of the Mole and made her way to the entrance of the Ship Canal.[2] The plan of operations had been the object of particularly close consideration. If *Intrepid* and *Iphigenia* were observed to be following her, *Thetis* was instructed to ram the lock-gates, while the other two sank themselves near the entrance at the southern end of the Canal piers, where, irrespective of the success or failure of *Thetis*, they would be certain to set up silt.

Circumstances prevented *Thetis* from carrying out her instructions. Under fire from the Mole extension's six guns, but unmolested by the 5·9-in. battery, whose attention was diverted from the block-ships by the naval landing party, she made for what appeared to be an opening in the defensive obstruction in the harbour, fouled the nets, and was

[1] *Infra*, p. 67. [2] Dispatch of May 9, para. 92 ff.

THE MOLE AT ZEEBRUGGE
General View

300 yards from the eastern pier-head when both her engines were brought up. She had a list to starboard and was settling down, having been frequently holed on her Mole side by gun-fire. Her starboard engine was restarted, however; her head was swung into the dredged channel; the charges were fired, and the ship quickly sank. But she had cleared a path for her consorts. Her crew were taken off by M.L. 526.

Intrepid, directed by *Thetis*, passed her leader, and unmolested by enemy gun-fire—which was concentrated on *Thetis* and *Vindictive*—reached her assigned position in the canal, where she was sunk. All of her crew,[1] with one exception, were got away, mainly through the heroism of M.L. 282, commanded by Lieutenant Percy T. Dean, R.N.V.R. *Iphigenia*, last of the block-ships, twice hit on the starboard, or Mole, side, made for the gap which *Intrepid* had left between herself and the eastern bank of the Canal. With complete success her commander reached his position, fired the charges, and sank the ship. Her crew were rescued, with few casualties, by M.L. 282. Not the least detail of a hazardous adventure is the heroism of M.L.s 282 and 526. M.L. 110, their partner in the work of rescue, was sunk.

Besides their screening duties, the C.M.B.s were employed in attacking enemy vessels within the Mole's protection. Most of the German Flotilla had been withdrawn to Bruges before the action, and only two craft lay alongside the Mole, apparently without having steam up.[2] C.M.B. 7 reported a torpedo hit upon one of them. C.M.B. 32 A fired a torpedo at Captain Fryatt's old ship

[1] She had a complement of 87 instead of 54. Her surplus crew had not been taken off, chiefly owing to their determination to take part in the fight. See the Dispatch, para. 95.

[2] Dispatch of May 9, para. 10.

Brussels, and an explosion followed. C.M.B. 5 encountered a destroyer emerging from the harbour and torpedoed her below her forward searchlight.[1] The destroyer *North Star* also discharged her torpedoes at vessels alongside the Mole, but coming under very heavy fire at point-blank range was disabled and eventually sank.[2] Two motor-launches also were lost. The material casualties of the adventure were extraordinarily slight.

The attack on Zeebrugge was completely successful in achieving the first and most important object of the operations—the outlet of the Bruges Ship Canal to the sea was effectually blocked. The second object—the sealing of the entrance to Ostend harbour—was not achieved, for reasons which reflect in no way upon the plan or those responsible for its accomplishment.

Sirius and *Brilliant* were timed to reach the entrance to Ostend harbour at midnight.[3] At 11.20 p.m. the six monitors began their bombardment.[4] The smoke-screen craft performed their task successfully until, at 11.50 p.m., the wind changed to from off-shore. Ten minutes later the block-ships arrived at the Stroom Bank buoy, where they were to find their direction for the harbour. Arrived there, and meeting the adverse smoke, they were prevented from taking bearings which would have shown them that the buoy had been moved to a point 2,400 yards east of its accustomed situation. Taking a line which, had the buoy been in its original position, would have led them into Ostend harbour, the two block-ships drove ashore some 2,400 yards east of it.[5] *Brilliant*, who was

[1] Dispatch of May 9, para. 120. On October 14, 1918, the *Brusse's* was again attacked as she lay alongside the store shed on the Mole. She was used as a torpedo training ship.

[2] *Ibid.*, para. 112. [3] *Ibid.*, para. 25. [4] *Ibid.*, para. 20.

[5] *Ibid.*, para. 26; Commodore Lynes's Report, para. 6 (*a*), 11 (*d*).

leading, observing breakers where the Ostend piers should have been seen, starboarded her helm, but too late to avoid grounding. *Sirius* put her helm hard over and her engines astern. But the ship, badly damaged by gun-fire and sinking, did not answer the helm, collided with the port quarter of *Brilliant*, and grounded firmly. Both were blown up where they stranded at 12.30 a.m. Their crews were rescued by M.L.s 276 and 283. A small party of *Sirius's* crew pulled thirteen miles out to sea before they were picked up by *Attentive*.[1] Meanwhile, at 1 a.m. the 'retirement' had been sounded. Until daylight the destroyers continued to cruise and pick up stragglers. No enemy craft were seen, and at 7.30 a.m. the force returned to Dunkirk. All the crews of the block-ships were saved. All the M.L.s returned intact, with very slight casualties. The C.M.B.s were equally fortunate, and their personnel casualties were only six wounded. But the operation, partly owing to the change of wind, chiefly to the success of the enemy's *ruse de guerre* in changing the situation of the Stroom Bank buoy, was a failure.[2] Ostend harbour remained open from the sea and for the passage of small craft through the lesser waterways from Bruges. The operations of May 10 were necessary and were already contemplated.

[1] Dispatch of May 9, para. 25, 98 ff.
[2] Commodore Lynes, para. 11–13.

(a) *Captain Carpenter's Narrative.*[1]

'Once it had been decided to make an attack on the Mole,[2] we had to have a large number of men to carry it out, and to obtain suitable ships. So the Grand Fleet, the main naval dépôts, and the various Commands,[3] were asked to lend a certain number of the most suitable men they had. These men were given to understand that they were going on a hazardous enterprise,[4] so far as I know, and therefore one can say that they volunteered for it, although they were not actually told at the time what they were going to do.[5]

[1] *The Times*, April 26, 1918. Commander (now Captain) Alfred Francis Blakeney Carpenter received the V.C. 'for most conspicuous gallantry' on April 23, 1918.

[2] The Zeebrugge Mole, along with the harbour and canal, was built, at a cost of nearly 42,000,000 francs, between 1895 and 1907. The Mole is constructed mainly of concrete blocks. The canal is 230 feet wide and 25 feet deep.

[3] For the contribution of the various Commands see the Dispatch of May 9, para. 31.

[4] Lieutenant-Commander Hilton Young gives the wording of the invitation: 'Volunteers are wanted for an undertaking of real danger' (*Cornhill Magazine* for December 1918, p. 593).

[5] 'They were all picked men—picked from volunteers. We tried them out under intensive training until we got exactly the men we wanted. That, naturally, was a long and anxious job. At first they thought it was for a hazardous operation in France, and they were keen enough then; but later, when we entrusted them with the real secret, and they knew we were after Zeebrugge and Ostend, there was no holding them!'—Statement by Captain Carpenter in Keble Howard's *The Glory of Zeebrugge* (1918), p. 17. An Admiralty official, quoted in the *Daily Mail* of April 26, states: 'When the preparations were completed the volunteers were sent on board their ships, and for three weeks, while waiting for the favourable moment, never a man was allowed ashore.' The Dis-

However, before the operation actually took place, every man had to be informed quite clearly what was expected of him, because one fully realized that every officer might be knocked out and the men would be entirely on their own. Then the men undoubtedly had a chance of saying that they did not want to go, perhaps for family reasons; but, so far as I know, there was not a single case of a man asking to be left behind. To my knowledge, in fact, in one ship (the *Intrepid*), where orders had been given that certain men were to be left behind, those men in almost a mutinous spirit came up before their captain and said they absolutely refused to leave the ship. As it happened, in this particular case, owing to a slight hitch, the extra crew of this ship were not taken off.[1] The whole of the men went into Zeebrugge Canal in the block-ship, and the whole of them were saved and brought back.

'The nature of the operation was such that it required the use of a very large number of small craft;[2] and the trip across the sea being rather over a hundred miles[3] each way made it necessary that the weather should be fine. At the same time the wind had to be on-shore, so that we could use our smoke-screens effectively. At the same time, too, the operation had to be carried out at high water, so as to allow the block-ships to get in. Again, owing to the presence of a large number of

patch of May 9, para. 30, speaks of 'anxious days of waiting in crowded ships in a secluded [West Swin] anchorage' from April 4 onwards (para. 33).

[1] The statement applies also to *Iphigenia*. See Dispatch of May 9, para. 95, 96.

[2] See note 2 on p. 29, *supra*.

[3] *i. e.* from Dover to Zeebrugge. Dover was left at 1.10 p.m., the point of concentration (63 miles) at 4.53 p.m. Steaming at ten knots the full distance took nearly eleven hours to accomplish.

German guns on the Belgian coast[1] it was necessary to carry out the operation at night; and it was fully realized that if it were carried out in the latter part of the night—that is to say, by the morning twilight—there was practically no chance of any ship getting away in the early morning, when they could be seen from the shore.[2] It was, therefore, a rather complicated combination of conditions that we required, and during the period that we were waiting for a suitable day[3] the disappointments were very great. Before the operation took place we had all gone over to within a few miles of our objectives and had to turn back owing to impossible weather conditions suddenly arising,[4] and it was with very anxious hearts that we waited for suitable weather conditions to occur, realizing that every day we waited made a greater chance for the news of the impending operation to leak out and get across to Germany, and for preparations to be made over there to defeat the operation at the outset. The chances of the vicinities of Zeebrugge and Ostend being heavily mined were considerable, and the risk of this had to be taken.[5]

[1] The Germans had at least 120 guns of heavy calibre in position on the 12 miles of coast separating Ostend from Zeebrugge. See note 8 on p. 10, *supra*.

[2] It was estimated that it would take *Vindictive* and her escort one hour and twenty minutes to get out of range on their return journey, and that half an hour before sunrise the visibility would be good enough to enable the German batteries to spot them. Hence, it was calculated that the ships must leave the Mole at latest one hour and fifty minutes before sunrise.—*Nineteenth Century*, June 1918, p. 1204. Approximately, sunrise at Ostend and Zeebrugge on April 23, 1918, was at 4.40 a.m. G.M.T. The latest moment for departure, therefore, was 2.50 a.m. The programme fixed it for 1.40 a.m. In fact *Vindictive* left at 1.10 a.m.

[3] From April 4. See note 5, p. 36, *supra*. [4] On April 11–12.

[5] Special arrangements were made for the salvage of crews and

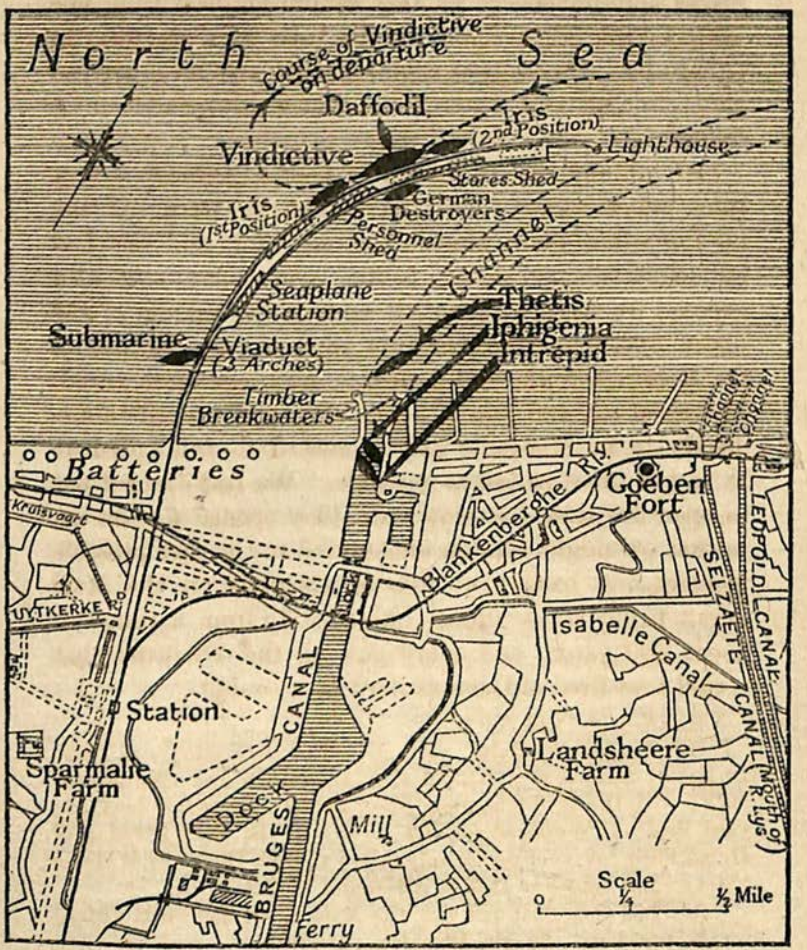
'At last [April 22] the opportunity we had waited for so long arose, and everybody started off in the highest spirits and with no other thought than to make the very greatest success of the operation that we could possibly do. Fate was very kind to us on the whole,[1] and everything went well, almost as per schedule. The various phases of the operation depended on accurate timing of the work of the various units.[2] The smoke-screen craft and the fast motor-boats at given intervals rushed on ahead at full speed, laid their smoke-screens, attacked enemy vessels [in the harbour] with torpedoes, and generally cleared the way for the main force, in addition to hiding the approach of the latter from the shore batteries. Meanwhile a heavy bombardment was being carried out by our monitors, and the sound of their firing as we approached was one of the most heartening things that I can remember. On arriving at a certain point some considerable distance[3] from shore the forces parted, some going to Zeebrugge and some to Ostend,

landing parties in the event of vessels being mined. See Dispatch of May 9, para. 17.

[1] The weather conditions broke down at the last moment and contributed to defeat the Ostend attack. On the other hand, the expedition encountered neither an unexpected mine field, nor scouting vessels, nor scouting planes to give warning. Nor did better conditions recur.

[2] One of the most noteworthy features of the operation, as Staff-Paymaster Cox points out (*Nineteenth Century*, June 1918, p. 1204), was the marvellous punctuality shown by the co-operating units: bombardment by monitors and coast-batteries at 11.20 p.m.; the fog-raising motor-boats to begin operations at 11.40 p.m.; *Vindictive* and her escort to clear the Mole at 12 a.m.; the submarine attack to cut the Mole from shore reinforcements at 12.15 a.m.; the leading block-ship to pass the lighthouse at 12.25 a.m.; and lastly the motor-craft to pick up the crews of the scuttled ships.

[3] According to the Press Bureau Narrative the distance was about 15 miles.



Plan of the Zeebrugge Raid, April 23.

Note.—The precise positions of the British ships are shown in the official plan on p. 110.

the idea being that the forces should arrive at the two places simultaneously, so that communication from one place to the other could not be used as a warning in either case. Precisely at midnight the main force arrived at Zeebrugge and two of the block-ships[1] arrived at Ostend.

'At midnight we [*Vindictive*[2]] steamed through a very thick smoke-screen. German star-shells were lighting up the whole place almost like daylight, and one had an extraordinary naked feeling when one saw how exposed we were, although it was in the middle of the night. On emerging from the smoke-screen the end of the Mole, where the lighthouse is, was seen close ahead, distant about 400 yards.[3] The ship was turned immediately to go alongside and increased to full speed so as to get there as fast as possible. We had decided not to open fire from the ship until they opened fire on us, so that we might remain unobserved to the last possible moment. A battery of five or six guns on the Mole began firing at us almost immediately from a range of about 300 yards, and every gun on the *Vindictive* that would bear fired at them as hard as it could.'[4]

[1] H.M.S. *Sirius* and *Brilliant*.

[2] H.M.S. *Vindictive*, light cruiser, launched 1897, completed 1898; 20 knots; normal complement 430; ten 6-inch and also smaller guns; with the Mediterranean Fleet 1900–4; thereafter in Dockyard Reserve; commissioned for service in the Nore Division of Home Fleet; served successively in 3rd and 4th Divisions of Home Fleet and as tender to H.M.S. *Albion* and H.M.S. *Vernon*.

[3] At 11.56 p.m. *Vindictive* saw the Mole about 300 yards distant on the port bow. See the Dispatch, para. 60.

[4] The *London Gazette* of July 23, 1918, announcing Captain Carpenter's distinction, states: 'When *Vindictive* was within a few yards of the Mole the enemy started and maintained a heavy fire from batteries, machine-guns, and rifles on to the bridge.' In the *Cornhill* article already quoted Lieut.-Commander Hilton Young writes: 'We were some 600 yards from the Mole,

'In less than five minutes the ship was alongside the Mole,[1] and efforts were made to grapple the Mole so as to keep the ship in place.[2] The *Daffodil*,[3] which was following close astern, came up, and in the most gallant manner placed her bow against the *Vindictive* and pushed the *Vindictive* sideways until she was close alongside the Mole. There was a very heavy swell against the Mole. The ships were rolling about, and this made the work of securing to the Mole exceedingly difficult.[4]

'When the brows[5] were run out from the *Vindictive* and had just begun to turn to starboard to run alongside it, when the storm broke. A searchlight shone out from the end of the Mole, swung to left and right, and settled on the ship. At once the guns of the Mole battery opened fire.' The battery had been reckoned to be of 4·1-in. guns. They proved to be 5·9's. Three of the six guns on the extension were 4·1's. See the Dispatch, para. 56, 71.

[1] Timed to arrive at 12 o'clock a.m. G.M.T., *Vindictive* actually made alongside the Mole at 12.1 a.m. Captain Carpenter was directed to fetch up 400 yards nearer the head of the Mole than the position he actually took. Consequently the 5·9 battery at the end of the Mole was not put out of action completely. The plan contemplated the landing parties storming the Mole on the top of the battery. See Dispatch, para. 71.

[2] It is wrongly stated in *How we Twisted the Dragon's Tail*, p. 41, that the special Mole anchors 'proved too short for the job'. See the Dispatch, para. 62.

[3] *Daffodil* arrived at 12.4 a.m. See the Dispatch, para. 62.

[4] Captain Carpenter does not mention *Iris*, for whose action see *infra*, p. 136. She first attempted to make fast to the Mole ahead of *Vindictive*. The heavy swell prevented her, and after heroic efforts she fell astern of *Vindictive* and began to land her parties over the cruiser. See the Dispatch, para. 63.

[5] To facilitate landing on the outer wall of the Mole, where landings are not wont to be made, *Vindictive* carried a false top-deck along her port side, that is, on the left side looking forward. From this false deck eighteen brows, or landing gangways, were operated, over which the storming parties could pass on to the Mole. Captain Carpenter describes a brow as 'a sort of light drawbridge with a hinge in the middle' (*The Glory of Zeebrugge*, p. 20). Its construction and appearance are easily realized from the illustration.

the men at once climbed out along them. It was an extremely perilous task, in view of the fact that the ends of the brows at one moment were from 8 ft. to 10 ft.[1] above the wall and the next moment were crashing on the wall as the ship rolled. The way in which the men got over those brows was almost superhuman. I expected every moment to see them falling off between the Mole and the ship—at least a 30-ft. drop—and being crushed by the ship against the wall. But not a man fell; their agility was wonderful. It was not a case of seamen running barefoot along the deck of a rolling ship; the men were carrying heavy accoutrements, bombs, Lewis guns, and other articles, and their path lay along a narrow and extremely unsteady plank. They never hesitated. They went along the brows and on to the Mole with the utmost possible speed. Within a few minutes three to four hundred had been landed,[2] and under cover of a barrage put down on the Mole by Stokes guns and howitzer fire from the ship they fought their way along.[3]

'Comparatively few of the German guns were able to hit the hull of the ship, as it was behind the protection of the wall. Safety, in fact, depended on how near you could get to the enemy guns instead of how far away. While the hull was guarded, the upper works

[1] In fact their weight kept them always resting on the parapet. They sawed backwards and forwards with the ship's motion.

[2] The German Admiralty's account (*infra*, p. 79) mendaciously states the number as forty, all of whom are said to have been taken alive or dead!

[3] An addendum to Captain Carpenter's narrative states that *Vindictive's* howitzers were trained on the Goeben Fort (east of the Canal mouth), the dock-gates inside the Canal mouth, and the shore batteries near the landward end of the Mole. The forward howitzer was put out of action and its crew suffered severely.

of the ship—the funnels, masts, ventilators, and bridge—were showing above the wall, and on these a large number of German guns appeared to be concentrated. Many of our casualties were caused by splinters coming down from the upper works.[1] If it had not been for the *Daffodil*[2] continuing to push the ship in towards the wall throughout the operation none of the men who went on the Mole would ever have got back again.

'About twenty-five minutes after the *Vindictive* got alongside, the block-ships were seen rounding the light-house[3] and heading for the canal entrance.' It was then realized on board the *Iris*, *Daffodil*, and *Vindictive* that their work had been accomplished. A quarter of an hour after the *Vindictive* took her position, and just before the blockers arrived, a tremendous explosion was seen at the shore end of the Mole.[4] We then knew that our submarine had managed to get herself in between the piles of the viaduct connecting the Mole with the shore and had blown herself up.[5] She carried several tons of

[1] 'Those chaps in the fighting-top' were attracting a lot of attention, and the Huns were constantly trying to drop a shell amongst them. They succeeded at last, I'm sorry to say, and laid out every man-jack but one—Sergeant Finch. He was wounded badly, but dragged himself out from under the bodies of his pals and went on working his little gun until he couldn't work it any longer.'—Captain Carpenter's statement in *The Glory of Zeebrugge*, p. 23. Finch kept up his fire until the fighting-top was destroyed by a direct hit. He received the V.C.

[2] *Daffodil* managed to develop double her normal steam-pressure for the purpose. Eventually she landed her storming party over *Vindictive*.

[3] *Vindictive* got alongside the Mole at 12.1 a.m. G.M.T. The leading block-ship passed the actual Mole end at 12.25.

[4] At 12.20 a.m. G.M.T. See accounts of Submarine C 3's performance *infra*, p. 78, and the Dispatch, para. 23, 86 ff.

[5] 'I never saw such a column of flame! It seemed a mile high.' (Captain Carpenter, in *The Glory of Zeebrugge*, p. 22.)

high explosive, and the effect of her action was effectually to cut off the Mole from the land. Before the explosion the crew of the submarine, which comprised some half-dozen officers and men,[1] got away in a very small motor skiff, which lost its propeller and had to be pulled with paddles against a heavy tide and under machine-gun fire from a range which could be reckoned only in feet. Most of the crew were wounded, but the tiny boat was picked up by a steam-pinnace.[2]

'It is possible that the Germans, who saw the submarine coming in under the play of their searchlights, thought that her object was to attack the vessels within the Mole and that she thought it feasible to get through the viaduct [into the harbour basin] to do this. Their neglect to stop the submarine as she approached could only be put down to the fact that they knew she could not get through, owing to the large amount of interlacing between the piles,[3] and that they really believed they were catching her. A large number of Germans were actually on the viaduct a few feet above the submarine, and were firing at her with machine-guns. I think it can safely be said that every one of those

[1] Lieutenant R. D. Sandford, R.N., in command, Lieutenant J. Howell-Price, D.S.C., R.N.R., Stoker H. C. Bindall, P.O. Walter Harner, Leading Seaman W. G. Cleaver, Engine-room Artificer A. G. Roxburgh.

[2] The steam-pinnace or picket-boat was commanded by Lieutenant Sandford's brother, Lieut.-Commander F. H. Sandford. See Dispatch, para. 91.

[3] The open passage from outside to within the harbour had been covered over with a sort of steel curtain, leaving a hole for the tide to run through. The submarine made for the hole.—Statement by Lieutenant-Commander Sandford in *The Glory of Zeebrugge*, p. 35. The explosion, according to the Press Bureau account, made a gap of more than 100 ft. in the structure. See another statement by Lieutenant-Commander Sandford *infra* note, p. 75, and the Dispatch, para. 88.

Germans went up with the viaduct. The cheer raised by my men in the *Vindictive* when they saw the terrific explosion was one of the finest things I ever heard. Many of the men were severely wounded—some had three and even four wounds—but they had no thought except for the success of the operation.

'The block-ships came under very heavy fire immediately they rounded the end of the Mole. Most of the fire, it appears, was concentrated on the leading ship, the *Thetis*.[1] She ran ashore off the entrance to the canal on the [western] edge of the channel,[2] and was sunk as approximately as possible across the channel itself, thus forming an obstruction to the passage of the German vessels. Before going down she gave a signal to the other two block-ships, which were following close behind, to inform them which side of her to pass in order to get to the canal entrance. This co-operation between the three block-ships, carried out under extremely heavy fire, was one of the finest things of the operation. The second and third ships, the *Intrepid* and *Iphigenia*, both went straight through the canal entrance until they actually reached a point some two or three hundred yards inside the shore lines, and behind some of the German batteries.[3] It really seems very wonderful. How the crews of the two ships ever got away is almost beyond imagination. A motor-launch[4]

[1] H.M.S. *Thetis*, *Intrepid*, and *Iphigenia* were sister ships of the *Apollo* class, launched about 1891, displacing about 3,600 tons each, and latterly used as mine-layers.

[2] The explanation of her mishap is given by the Press Bureau account *infra*, p. 58, and the Dispatch, para. 94.

[3] See the sea-plane photograph at p. 112. *Iphigenia*, last of the block-ships, was sunk at 12.45 a.m. See Dispatch, para. 24.

[4] Lieutenant P. T. Dean, R.N.V.R. One M.L. followed each block-ship. No. 110 was sunk rounding the Mole. No. 526

seems to have picked up the majority of them in an extraordinarily gallant way under extremely heavy fire from very short range. The launch got clear and put the crews on board destroyers. A number of other men escaped by their own boats. They had to pull several miles out to sea, and were then picked up by vessels outside.

'The situation rather more than an hour after the *Vindictive* got alongside was this: The block-ships had passed in, had come to the end of their run, and had done their work. The viaduct was blown up and the Mole had been stormed.[1] Nothing but a useless sacrifice of life could have followed if the three boarding vessels had remained by the Mole any longer. The signal to withdraw was therefore given, and the ships got away under cover of their smoke-screens as quickly as they could. I have already told you that owing to the ships being so close to the German guns, that is to say, right alongside the wall, they were comparatively immune from hits. But it was realized that as soon as we left the shelter of the wall we should come under exceedingly heavy fire. I doubt whether there was anybody on board who really thought we should get back. The signal [for the re-embarkation of the landing parties] was given by siren,[2] but the noise of the guns was so loud that it had to be repeated many times. Twenty minutes passed before it was definitely reported that there was nobody left on the Mole who could possibly get on the with-

brought away the crew of *Thetis*. Lieutenant Dean, following *Iphigenia* in No. 282, rescued 101 men from *Iphigenia* and *Intrepid*.

[1] For this operation see *infra*, p. 67, and the Dispatch, para. 67 ff.

[2] *Daffodil's* siren made the signal at 12.50 a.m. *Vindictive's* searchlights, which had been intended to give twenty minutes' warning, had been destroyed, as well as her siren which was to have given the executive signal. See the Dispatch, para. 104.

drawing ships. All three ships got away from the wall.[1] They went at full speed and were followed all the way along their course by salvos from the German guns. Shells seemed to fall all round the ships without actually hitting them.[2] The gunners apparently had our speed but not our range, and with remarkable regularity the salvos plopped into the sea behind us. In a short time the ships were clear of imminent danger owing to the large amount of smoke which they had left behind them.[3]

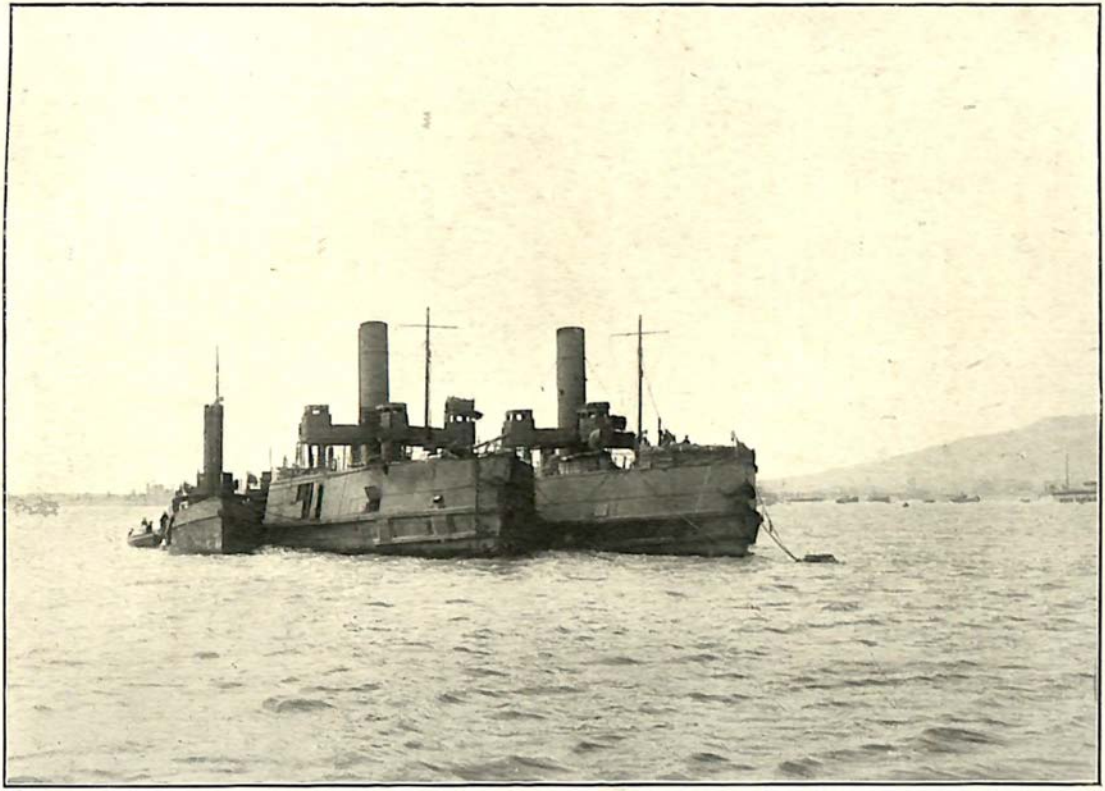
'Should the Germans, who appear to suffer from an extreme gift of imagination, ever suggest that the *Vindictive* did not get alongside the Mole, their story could easily be refuted by the fact that we brought away a piece of Zeebrugge Mole, weighing about a quarter of a ton, which fell on my ship.'[4]

[1] Approximately 1.10 a.m. G.M.T. *Vindictive* was clear at 1.15 a.m. One hour and nine minutes was the precise duration of *Vindictive's* stay alongside the Mole. There is a careful account of the operation in *A Light Ship* (1918) by 'Taffrail'.

[2] The statement is true of *Vindictive* (see Lieut.-Commander Hilton Young's article in the *Cornhill Magazine* for Dec. 1918), but not of *Iris*. Sir Roger Keyes's Dispatch of May 9 (para. 105) says: 'Shortly after leaving the Mole the ship came under a very heavy fire from the Mole and shore batteries, being hit ten times by small shell and twice by large ones. The first large shell carried away the port side of the bridge.' 'At that short range [400 or 500 yards]', writes Lieut.-Commander Hilton Young, 'the light fabric of the little ship was hulled through and through, flames and smoke spurting from her far side as the shells struck. I thought at the time that she had probably sunk.'

[3] Captain Carpenter omits to mention the gallant conduct of the small craft, which got between the three ships and the shore batteries and made clouds of smoke.

[4] According to a statement in the *Morning Post* of April 26, 1918, it is intended to use part of this relic for a memorial of the dead who fell in the Raid.



THE MERSEY FERRY-BOATS *IRIS* (right) and *DAFFODIL* (centre)

'On the way across, before the operation, the Admiral made the signal to the *Vindictive*, "St. George for England!" and the reply was made to him, "May we give the Dragon's tail a damned good twist". I think we succeeded in doing it.'

(*b*) *The Press Bureau Narrative.*[1]

'*April 24, 1918.*

'Those who recall High Wood upon the Somme—and they must be many—as it was after the battles of 1916, may easily figure to themselves the decks of His Majesty's Ship *Vindictive* as she lies to-day, a stark, black profile against the sea haze of the harbour [at Dover] amid the stripped, trim shapes of the fighting ships which throng these waters. That wilderness of débris, that litter of the used and broken tools of war, that lavish ruin, and that prodigal evidence of death and battle, are as obvious and plentiful here as there. The ruined tank nosing at the stout tree which stopped it has its parallel in the flame-thrower hut at the port wing of *Vindictive's* bridge, its iron sides freckled with rents from machine-gun bullets and shell-splinters. The tall white cross which commemorates the martyrdom of the Londoners is sister to the dingy, pierced White Ensign which floated over the fight on the Zeebrugge Mole.

'Looking aft from the chaos of her wrecked bridge, one sees, snug against their wharf, the heroic bourgeois shapes of the two Liverpool ferry-boats (their captains' quarters are still labelled "Ladies Only") *Iris* and *Daffodil*, which shared with *Vindictive* the honours and ardours of the fight. The epic of their achievement shapes itself in the light of that view across the scarred and littered decks, in that environment of grey water and great still ships.

[1] The complete text is in the *Morning Post*, April 26, 1918, and *The Glory of Zeebrugge*, pp. 43 ff.

'Their objectives were the canal of Zeebrugge and the entrance to the harbour of Ostend—theirs, and those of five other veteran and obsolete cruisers and a mosquito fleet of destroyers, motor-launches, and coastal motor-boats. Three of the cruisers, *Intrepid*, *Iphigenia*, and *Thetis*, each duly packed with concrete and with mines attached to her bottom for the purpose of sinking her, *Merrimac*-fashion,[1] in the neck of the canal, were aimed at Zeebrugge; two others, similarly prepared, were directed at Ostend. The function of *Vindictive*, with her ferry-boats, was to attack the great half-moon Mole which guards the Zeebrugge Canal, land blue-jackets and Marines upon it, destroy what stores, guns, and Germans she could find, and generally create a diversion while the block-ships ran in and sank themselves in their appointed place. Vice-Admiral Keyes, in the destroyer *Warwick*, commanded the operation.

'There had been two previous attempts at the attack, capable of being pushed home if weather and other conditions had served.[2] The night of the 22nd [of April] offered nearly all the required conditions, and at some fifteen miles off Zeebrugge the ships took up their formation for the attack. *Vindictive*, which had been towing *Iris* and *Daffodil*, cast them off to follow under their own steam; *Intrepid*, *Iphigenia*, and *Thetis* slowed down to give the first three time to get alongside the Mole; *Sirius* and *Brilliant* shifted their course for Ostend; and the great swarm of destroyers and motor-craft sowed themselves abroad upon their multifarious particular duties. The night was overcast, and there was a drift of haze;

[1] The *Merrimac*, commanded by Naval Constructor Hobson, was sunk in Santiago Harbour, during the Spanish-American War, on June 3, 1898. See *supra*, p. 22.

[2] See *supra*, p. 29, note.

down the coast a great searchlight swung its beam to and fro; there was a small wind and a short sea.

'From *Vindictive's* bridge, as she headed in towards the Mole, with her faithful ferry-boats at her heels, there was scarcely a glimmer of light to be seen shorewards. Ahead of her, as she drove through the water, rolled the smoke-screen, her cloak of invisibility, wrapped about her by the small craft. This was a device of Wing-Commander Brock,[1] R.N.A.S., "without which", acknowledges the Admiral in Command, "the operation could not have been conducted". The north-east wind moved the volume of it shoreward ahead of the ships; beyond it, the distant town and its defenders were unsuspicious; and it was not till *Vindictive*, with her blue-jackets and Marines standing ready for the landing, was close upon the Mole that the wind lulled and came away again from the south-west, sweeping back the smoke-screen and laying her bare to the eyes that looked seaward.[2]

'There was a moment immediately afterwards when it seemed to those in the ships as if the dim coast and the

[1] Wing-Commander Frank Arthur Brock, R.A.F., b. 1884; director of Messrs. C. T. Brock & Co., firework manufacturers; Flight-Commander, R.A.F., 1916; O.B.E., January 1918; a man of marked inventive genius. He invented the first powerful flares used for the Channel barrage (see a statement by Sir Roger Keyes in *The Times* of December 13, 1918). See the Dispatch, para. 37, on the 'fog' preparations.

[2] Lieut.-Commander Hilton Young (*Cornhill Magazine*, December 1918, p. 601) describes the scene: 'The sky was thick with a perfect rain of star-shells; but, clearly as they showed us to ourselves, it did not follow that they showed us to the Germans. As each star fell into the smoke-screen that now covered the sea, unless it was within a very few hundred yards of us it was eclipsed as a star and became a large vague nebula. Although there was plenty of light about, a few hundred yards from the ship [*Vindictive*] everything was blotted out in wreaths, eddies and whirls of glowing vapour'

hidden harbour exploded into light. A star-shell soared aloft,[1] then a score of star-shells; the wavering beams of the searchlights swung round and settled to a glare; the wildfire of gun-flashes leapt against the sky; strings of luminous green beads[2] shot aloft, hung, and sank; and the darkness of the night was supplanted by the nightmare daylight of battle-fires. Guns and machine-guns along the Mole and batteries ashore woke to life, and it was in a gale of shelling that *Vindictive* laid her nose against the thirty-foot high concrete side of the Mole, let go an anchor[3] and signed to *Daffodil* to shove her stern in. *Iris* went ahead and endeavoured to get alongside likewise.

'The fire, from the account of everybody concerned, was intense. While the ships plunged and rolled beside the Mole in an unexpected scend of sea, *Vindictive* with her greater draught jarring against the foundation of the Mole with every plunge, they were swept diagonally by machine-gun fire from both ends of the Mole and by heavy batteries ashore. Commander A. F. B. Carpenter (now Captain) conned *Vindictive* from her open bridge till her stern was laid in, when he took up his position in the flame-thrower hut on the port side. It is to this hut that reference has already been made; it is marvellous that any occupant of it should have survived a minute, so riddled and shattered is it.'[4] Officers of *Iris*, which was in trouble ahead of *Vindictive*, describe Captain Carpenter as "handling her like a picket-boat".

[1] It seems that *Vindictive* was about twenty minutes from the Mole when the Germans sent up the warning star-shell. This estimate is confirmed by Lieut.-Commander Hilton Young in the *Cornhill Magazine*, December 1918, p. 602 n.

[2] Generally called 'flaming onions'. See *infra*, p. 64, note 4.

[3] See the Dispatch, para. 62, for *Vindictive*'s difficulties here.

[4] See the picture at p. 80.

'*Vindictive* was fitted along the port side with a high false deck, whence ran the eighteen brows,[1] or gangways, by which the storming and demolition parties were to land.[2]

'The men were gathered in readiness on the main and lower decks, while Colonel Elliot,[3] who was to lead the Marines, waited on the false deck just abaft the bridge, and Captain H. C. Halahan,[4] who commanded the blue-jackets, was amidships. The gangways were lowered, and scraped and rebounded upon the high parapet of the Mole as *Vindictive* rolled; and the word for the assault had not yet been given when both leaders were killed, Colonel Elliot by a shell, and Captain Halahan by the machine-gun fire which swept the decks. The same shell that killed Colonel Elliot also did fearful execution in the forward Stokes Mortar Battery.

'"The men were magnificent." Every officer bears the same testimony. The mere landing on the Mole was a perilous business; it involved a passage across the crashing, splintering gangways, a drop[5] over the parapet

[1] An officer of the landing party (quoted in *The Times*, April 25, 1918) states that only two proved serviceable for landing purposes, the remainder having been shot away. Two others were got into order. See the Dispatch, para. 62.

[2] The primary object of the attack on the Mole was the capture of the 5·9-in. battery at its sea end, a serious menace to the passage of the block-ships. A secondary object was to damage the material on the Mole in the time required for blocking the canal, and to distract the enemy's attention in some degree from the main operation, *i. e.* the sinking of the block-ships. The Mole attack consisted of (*a*) the landing of storming and demolition parties at the sea end, and (*b*) the destruction of the iron viaduct connecting the Mole with the shore.

[3] Lieutenant-Colonel Bertram Nowel Elliot, D.S.O.

[4] Captain Henry Crosby Halahan, D.S.O., R.N.

[5] Of about four feet on to a ledge, about eight feet wide, with an iron railing on the harbour-side, which runs along the inner wall of the Mole. From the ledge to the surface of the Mole there is a drop of fifteen feet. See the Dispatch, para. 72.

into the field of fire of the German machine-guns, which swept its length, and a further drop of some 15 ft. to the surface of the Mole itself. Many were killed and more were wounded as they crowded up to the gangways; but nothing hindered the orderly and speedy landing by every gangway. Lieutenant H. T. C. Walker had his arm carried away by a shell on the upper deck, and lay in the darkness while the storming parties trod him under. He was recognized and dragged aside by the Commander [Carpenter]. He raised his remaining arm in greeting. "Good luck to you," he called, as the rest of the stormers hastened by; "good luck!"

'The lower deck was a shambles as the Commander made the rounds of his ship; yet those wounded and dying raised themselves to cheer as he made his tour. The crew of the howitzer which was mounted forward had all been killed; a second crew was destroyed likewise; and even then a third crew was taking over the gun.[1] In the stern cabin a firework expert who had never been to sea before—one of Captain Brock's employees—was steadily firing great illuminating rockets out of a scuttle to show up the lighthouse on the end of the Mole to the block-ships and their escort.[2]

'*Daffodil*, after aiding to berth *Vindictive*, should have proceeded to land her own men, but now Commander Carpenter ordered her to remain as she was, with her bows against *Vindictive's* quarter, pressing the latter ship into the Mole.[3] Normally *Daffodil's* boilers develop eighty pounds' pressure of steam per inch; but now, for this

[1] See the Dispatch, para. 64.

[2] *Thetis* was much aided by this.... See Dispatch, para. 94.

[3] *Daffodil* should have come alongside *Vindictive* to land her parties. But having to shore *Vindictive* on to the Mole during the whole operation, *Daffodil's* men had to disembark from her bows on to *Vindictive*. See Dispatch, para. 62.

particular task, Artificer-Engineer Sutton,[1] in charge of them, maintained a hundred and sixty pounds for the whole period that she was holding *Vindictive* to the Mole.[2] Her casualties, owing to her position during the fight, were small—one man killed and eight wounded, among them her commander, Lieutenant H. Campbell,[3] who was struck in the right eye by a shell splinter.

'*Iris* had troubles of her own. Her first attempts to make fast to the Mole ahead of *Vindictive* failed, as her grapnels were not large enough to span the parapet.[4] Two officers, Lieutenant-Commander Bradford[5] and Lieutenant Hawkings,[6] climbed ashore and sat astride the parapet trying to make the grapnels fast till each was killed and fell down between the ship and the wall. Commander Valentine Gibbs[7] had both legs shot away, and died next morning. Lieutenant Spencer, R.N.R., though wounded, took command, and refused to be relieved.[8] *Iris* was obliged at last to change her

[1] Art.-Engineer William Mark Sutton, R.N., received the D.S.C. For this and other decorated officers' record of service see the *London Gazette* of July 23, 1918.

[2] Had not *Daffodil* been so employed *Vindictive* could not have been held in position at the Mole nor the landing parties have been able to return to the ship.

[3] Lieutenant Harold George Campbell, R.N., received the D.S.O.

[4] This is not accurate. See note 2, p. 42, *supra*.

[5] Lt.-Commander G. N. Bradford, R.N. He was the first to set foot on the Mole, writes Lieutenant-Commander Hilton Young (*Cornhill Magazine*, Dec. 1918, p. 604). He climbed up a davit and jumped ashore. But see the Dispatch, para. 72.

[6] Lieutenant C. E. V. Hawkings, R.N.

[7] Commander Valentine Francis Gibbs, R.N.

[8] Lieutenant G. Spencer, D.S.C., R.N.R.; died of wounds. The statement in the text needs correction. Lieutenant Spencer, who was acting as navigator, lay severely wounded on the remnants of the bridge, conning the ship away from the Mole. Lieutenant Oscar Henderson, representing the Portsmouth Command, promptly

position, and fall in astern of *Vindictive*,[1] and suffered very heavily from the fire. A single big shell plunged through the upper deck and burst below at a point where fifty-six Marines were awaiting the order to go to the gangways. Forty-nine were killed, and the remaining seven wounded. Another shell in the ward-room, which was serving as sick-bay, killed four officers and twenty-six men. Her total casualties were eight officers and sixty-nine men killed and three officers and a hundred and two men wounded.

'The storming and demolition-parties upon the Mole met with no resistance from the Germans, other than the intense and unremitting fire. The geography of the great Mole, with its railway line and its many buildings, hangars, and store-sheds, was already well known, and the demolition-parties moved to their appointed work in perfect order. One after another the buildings burst into flame or split and crumbled as the dynamite went off.[2] A bombing party, working up towards the Mole extension in search of the enemy, destroyed several machine-gun emplacements, but not a single prisoner rewarded them. It appears that on the approach of the ships and with the opening of the fire, the enemy simply retired and con-

went up and took command. He received the D.S.O. See the Dispatch, para. 105.

[1] Lieutenant-Commander Hilton Young writes (*Cornhill Magazine*, Dec. 1918, p. 604: 'Now, the *Iris* was going to try to land her parties over the *Vindictive*. But beside the *Vindictive* the *Iris* danced in the swell like a cork, and it was some time before we could get a hawser on board from her, or secure it when we had got it. At last it was done, and the men in the *Iris*, watching their opportunity, began to jump into the *Vindictive*. But meanwhile time had fled. We seemed to have been alongside a few minutes only; we had been there an hour, and it was almost time to go.' See the Dispatch, para. 63.

[2] The statement is incorrect.

tented themselves with bringing machine-guns to the shore end of the Mole. And while they worked and destroyed, the covering party below the parapet could see in the harbour, by the light of the German star-shells, the shapes of the block-ships stealing in and out of their own smoke and making for the mouth of the canal.

'*Thetis* came first, steaming into a tornado of shell from the great batteries ashore. All her crew, save a remnant who remained to steam her in and sink her, had already been taken off her by the ubiquitous motor-launches, but the remnant spared hands enough to keep her four guns going. It was hers to show the road to *Intrepid* and *Iphigenia*, who followed. She cleared the string of armed barges which defends the channel from the tip of the Mole, but had the ill-fortune to foul one of her propellers upon the net-defence which flanks it on the shore side. The propeller gathered in the net and rendered her practically unmanageable; the shore batteries found her and pounded her unremittingly; she bumped into a bank, edged off, and found herself in the channel again, still some hundreds of yards from the mouth of the canal, in a practically sinking condition. As she lay she signalled invaluable directions to the others,[1] and here Commander R. S. Sneyd, D.S.O., accordingly blew the charges and sank her.[2] A motor-launch[3] under Lieutenant H.

[1] Before going down *Thetis* signalled to her consorts to pass to starboard of her by firing a green rocket. Engineer Lieutenant-Commander Ronald Charles Boddie restarted her starboard engine, thereby enabling the ship to be turned into the fairway before she sank. He received the D.S.O. See *The Navy Eternal*, p. 300, and Sir Roger Keyes's Dispatch, para. 94.

[2] Commander Ralph S. Sneyd, D.S.O., R.N., specially promoted to Captain for services in action.

[3] No. 526.

Littleton, R.N.V.R.,[1] raced alongside and took off her crew. Her losses were five killed and five wounded.

'*Intrepid*, smoking like a volcano and with all her guns blazing, followed; her motor-launch had failed to get alongside outside the harbour, and she had men enough for anything.[2] Straight into the canal she steered, her smoke blowing back from her into *Iphigenia's* eyes, so that the latter, blinded and going a little wild, rammed a dredger with a barge moored beside it, which lay at the western arm of the canal. She got clear, though, and entered the canal, pushing the barge before her. It was then that a shell hit the steam connexions of her whistle, and the escape of steam which followed drove off some of the smoke and let her see what she was doing.

'Lieutenant Stuart Bonham-Carter,[3] commanding the *Intrepid*, placed the nose of his ship neatly on the mud of the western bank,[4] ordered his crew away, and blew up his ship by the switches in the chart-room. Four dull bumps was all that could be heard, and immediately afterwards there arrived on deck the engineer, who had been in the engine-room during the explosion,[5] and reported that all was as it should be.

'Lieutenant E. W. Billyard-Leake,[6] commanding

[1] Lieutenant Hugh Alexander Littleton, R.N.V.R., received the D.S.O.

[2] See note 1, p. 33, *supra*.

[3] Lieutenant Stuart Sumner Bonham-Carter, R.N., received the D.S.O.

[4] *i. e.* on his starboard (right) side looking forward.

[5] As the ship was making stern way Lieut. Bonham-Carter had to blow the charges before the steaming party could get out of the engine-room. See the Dispatch, para. 95.

[6] Lieutenant Edward Whaley Billyard-Leake, R.N., received the D.S.O. Lieut. Ivan B. Franks, R.N., who had superintended the early preparations of all the block-ships, and had commanded *Iphigenia* on the occasion of the two abandoned attempts, was laid

Iphigenia, beached her according to arrangement on the eastern side, blew her up,[1] saw her drop nicely across the canal, and left her with her engines still going to hold her in position till she should have bedded well down on the bottom. According to latest reports from air observation, the two old ships, with their holds full of concrete, are lying across the canal in a V position; and it is probable that the work they set out to do has been accomplished, and that the canal is effectively blocked.[2]

'A motor-launch under Lieutenant P. T. Dean, R.N.V.R.,[3] had followed them in to bring away the crews, and waited further up the canal towards the mouth against the western bank. Lieutenant Bonham-Carter, having sent away his boats, was reduced to a Carley float, an apparatus like an exaggerated life-buoy with a floor of grating.[4] Upon contact with the water it ignited a calcium flare, and he was adrift in the uncanny illumination with a German machine-gun a few hundred yards away giving

low by appendicitis two days before the actual attack. See the Dispatch, para. 40.

[1] At 12.45 a.m. Sir Roger Keyes in the *London Gazette* of July 23 commends Lieut. Billyard-Leake 'for placing his ship by calculated manœuvring exactly where he wanted to place her to block the canal'.

[2] See the picture at p. 144.

[3] Commanding Motor-launch 282. Lieutenant Percy Thompson Dean received the V.C. 'for most conspicuous gallantry' on the occasion. Each block-ship was followed by a M.L., carrying a crew of eight to ten volunteers, to bring away survivors.

[4] Lieutenant Bonham-Carter with two of his officers and four petty officers remained behind, after the rest of the crew had been sent away, to see that the ship was sunk properly. The seven embarked in a Carley float, paddled down the canal and across the harbour, and were picked up by Lieutenant Dean in Motor-launch 282. Of all *Intrepid's* company only one man, Stoker P. Officer H. L. Palliser, was killed. See the Dispatch, para. 95. There were 180 officers and men in the three block-ships.

him its undivided attention. What saved him was possibly the fact that the defunct *Intrepid* was still emitting huge clouds of smoke which it had been worth nobody's while to turn off.[1] He managed to catch a rope as the motor-launch started, and was towed for a while till he was observed and taken on board. Another officer jumped ashore and ran along the bank to the launch. A bullet from the machine-gun stung him as he ran, and when he arrived, charging down the bank out of the dark, he was received by a member of the launch's crew, who attacked him with a hammer.

'The whole harbour was alive with small craft. As the motor-launch cleared the canal and came forth to the incessant geysers thrown up by the shells, rescuers and rescued had a view of yet another phase of the attack. The shore end of the Mole consists of a jetty, and here an old submarine,[2] commanded by Lieutenant R. D. Sandford, R.N.,[3] loaded with explosives, was run in to the piles and touched off, her crew getting away in a boat to where the usual launch awaited them. Officers describe the explosion as the greatest they ever witnessed—a huge roaring spout of flame that tore the jetty in half and left a gap of over 100 ft. The claim of another launch to have sunk a torpedo-boat alongside the jetty is supported by many observers, including officers of the *Vindictive*, who had seen her mast and funnel across the Mole and noticed them disappear.[4]

[1] A photograph taken by a German airman (*Illustrated London News*, Feb. 22, 1919) at 11 a.m. on April 23, 1918, shows *Intrepid* still emitting clouds of smoke at that hour.

[2] Submarine C 3. See accounts of her exploit *infra*, p. 73.

[3] Lieutenant Richard Douglas Sandford, R.N. Received the V.C. 'for most conspicuous gallantry' on the occasion.

[4] Probably a dredger sunk by *North Star*. C.M.B. 7 torpedoed a destroyer alongside the Mole. A German destroyer was sunk in

'Where every moment had its deed and every deed its hero, a recital of acts of valour becomes a mere catalogue. "The men were magnificent," say the officers; the men's opinion of their leaders expresses itself in the manner in which they followed them, in their cheers, in their demeanour to-day while they tidy up their battered ships, setting aside the inevitable souvenirs, from the bullet-torn ensigns to great chunks of Zeebrugge Mole dragged down and still hanging in the fenders of *Vindictive*.

'The motor-launch from the canal cleared the end of the Mole and there beheld, trim and ready, the shape of the *Warwick*,[1] with the great silk flag presented to the Admiral by the officers of his old ship *Centurion*. They stood up on the crowded decks of the little craft and cheered it again and again.[2] While *Warwick* took them on board, they saw *Vindictive*, towed loose from the Mole by *Daffodil*, turn and make for home—a great black shape, with funnels gapped and leaning out of the true, flying a vast streamer of flame as her stokers worked her up—her, the almost wreck—to a final display of seventeen knots. Her forward funnel was a sieve; her decks were a dazzle of sparks: but she brought back intact the horseshoe nailed to it, which Sir Roger Keyes had presented to her Commander.

'Meantime the destroyers *North Star*, *Phoebe*, and *Warwick*, which guarded *Vindictive* from action by enemy destroyers while she lay beside the Mole, had

the channel close to *Intrepid* and *Iphigenia* by a heavy bomb from an aircraft some days later.

[1] Vice-Admiral Keyes directed the operations from this destroyer.

[2] *Warwick* picked up four M.L.s. The one mentioned in the text was No. 282 (Lt. P. T. Dean). It had on board 101 people from *Intrepid* and *Iphigenia*. It was dangerously overloaded. See the Dispatch, para. 111.

their share in the battle.[1] *North Star* (Lieutenant-Commander K. C. Helyar, R.N.),[2] losing her way in the smoke, emerged to the light of the star-shells, and was sunk.[3] The German *communiqué*,[4] which states that only a few members of the crew could be saved by them, is in this detail of an unusual accuracy; for the *Phoebe* (Lieutenant-Commander H. E. Gore-Langton, R.N.[5]) came up under a heavy fire in time to rescue nearly all. Throughout the operation monitors and the siege guns in Flanders, manned by the Royal Marine Artillery, heavily bombarded the enemy's batteries.

The Attack on Ostend.[6]

'The wind that blew back the smoke-screen at Zeebrugge served us even worse at Ostend, where that and nothing else[7] prevented the success of an operation ably

[1] See the Dispatch, para. 111–13.

[2] Lieut.-Commander Kenneth Cary Helyar, R.N., received the D.S.O.

[3] 'When we ran into the harbour,' says a member of her crew (*Daily Mail*, April 25), 'we ran out of darkness into light brighter than daylight. They got searchlights all focussed on us and at point-blank range they poured stuff into us and all over us from guns big and little. Our port side was riddled from end to end, our aft funnel went, our wireless room was put out of action, and then they smashed our bow.' From Sir Roger Keyes's Dispatch, para. 112, it appears that while *Warwick* was engaged as in note 2, p. 62, *North Star* lost her bearings and emerged from the smoke-screen to the S.E. of the lighthouse on the Mole. She fired all her torpedoes at vessels alongside the Mole, but was sunk by heavy fire at point-blank range, presumably by the 8-in. battery east of the Canal entrance.

[4] *Infra*, p. 79.

[5] Lieut.-Commander Hubert E. Gore-Langton, R.N., specially promoted to Commander for services in the action.

[6] See Commodore Lynes's Report, *infra*, p. 172, and the Dispatch, para. 98 ff.

[7] This is not accurate. The displacing of the Stroom Bank buoy was the major cause of failure.

directed by Commodore Hubert Lynes, C.M.G.[1] The coastal motor-boats had lit the approaches and the ends of the piers with calcium flares, and made a smoke cloud which effectually hid the fact from the enemy. *Sirius* and *Brilliant*[2] were already past the Stroom Bank buoy[3] when the wind changed, revealing the arrangements to the enemy, who extinguished the flares with gunfire.[4]

'*Sirius*' was already in a sinking condition,[5] when at

[1] Commanding the naval light forces at Dunkirk; received the C.B. for services in the action.

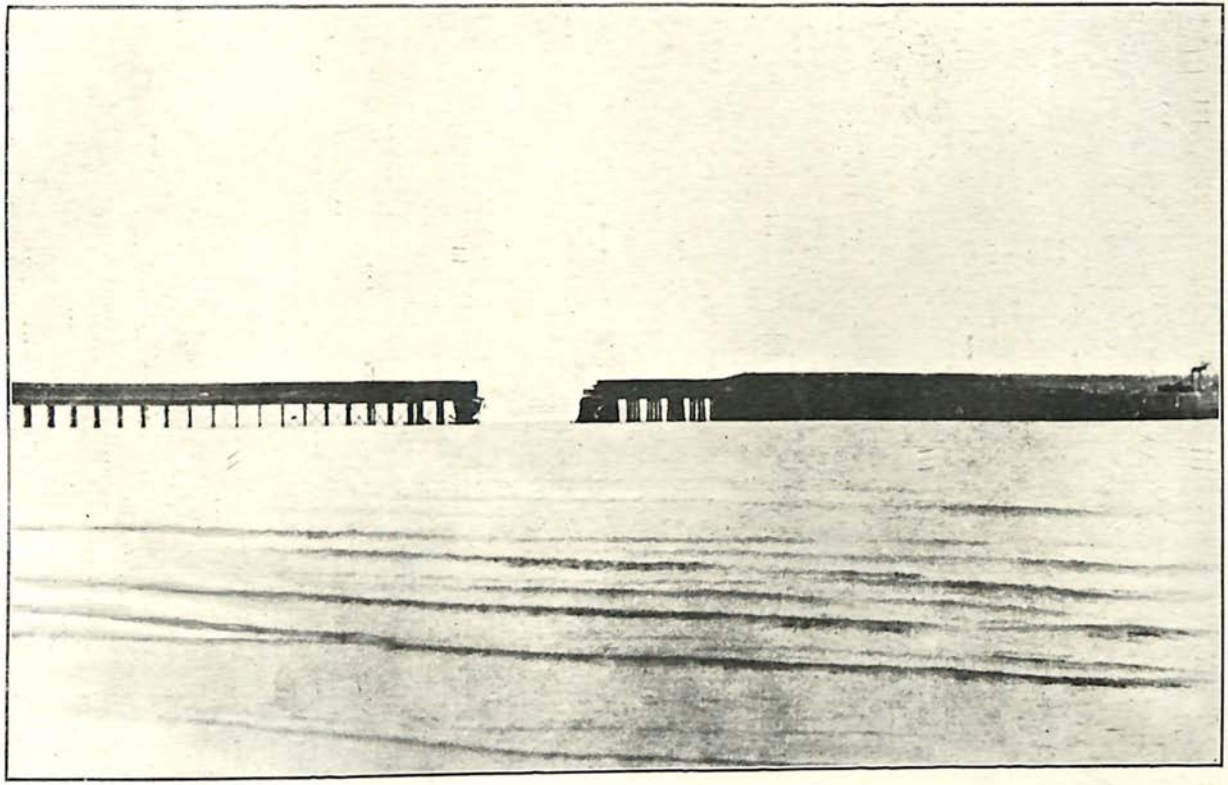
[2] *Sirius* (Lieut.-Commander H. N. M. Hardy, R.N.) and *Brilliant* (Commander A. E. Godsal, R.N.) were sister ships, light cruisers of the *Apollo* type, displacing 3,600 tons each, launched in 1890 and 1891 respectively, with an armament of two 6-inch and lesser guns.

[3] The Stroom Bank buoy marked the channel to the harbour entrance. It had been moved some 2,400 yards east of its customary position immediately before the attack. See the Dispatch, para. 26.

[4] Another account (*The Times*, April 27, 1918) says that *Sirius* and *Brilliant* were about two miles from their objective when the German searchlights picked them up. The ships at once came under extremely heavy fire, which included a missile known as 'flaming onions', a small incendiary shell fastened together in chains by wire which, on finding its target, winds round it and creates a fire. Commodore Lynes's Report (para. 11 f.) confirms this. From the Report it appears that the wind shifted about 11.50 p.m. and that the block-ships entered the smoke abreast the buoy about 12. The Dispatch, para. 26, gives 12.15 as the moment of the change of wind. The block-ships sank at 12.30 a.m.

[5] The account quoted in the preceding note says that the commander of *Sirius*, whose ship was sinking as the result of gunfire, tried to warn the engine-room of his intention to blow the bottom out of her. He was foiled in his purpose owing to the means of communication having been destroyed. The rush of water into the engine-room was the first indication to the staff there that the demolition charge had been fired. After leaving *Sirius* an officer and a number of men were found to be missing. A C.M.B. commanded by Acting Sub-Lieutenant Peter Booth Clarke, R.N.R., with Lieutenant-Commander Henry N. M. Hardy (of *Sirius*), R.N., and Lieutenant Edward Lyon Berthon, D.S.C., returned and

THE MOLE AT ZEEBRUGGE, SHOWING THE VIADUCT (foreground)



ZEEBRUGGE VIADUCT AFTER THE ATTACK

length the two ships, having failed to find the entrance, grounded and were forced, therefore, to sink themselves at a point about 400 yards east of the piers,[1] and their crews were taken off by motor-launches under Lieutenant K. R. Hoare, R.N.V.R.,[2] and Lieutenant R. Bourke, R.N.V.R.[3]

'The motor-launches here at Ostend were under the command of Commander Hamilton Benn, R.N.V.R., D.S.O., M.P.,[4] while those at Zeebrugge were commanded by Captain R. Collins, R.N. (the Vice-Admiral's Flag Captain).[5] All the coastal motor-boats were commanded by Lieutenant A. P. Welman, D.S.C., R.N.[6] The torpedo-boat destroyer flotilla was commanded by Captain Wilfred Tomkinson, R.N.[7]

'The difficulty of the operation is to be gauged from the fact that from Zeebrugge to Ostend the enemy batteries number not less than 120 heavy guns, which can concentrate on retiring ships, during daylight, up

boarded the ship. The missing men were subsequently picked up thirteen miles out to sea. Lieutenant Berthon received a bar to the D.S.C. Sub-Lieutenant Clarke received the D.S.C. Lieutenant-Commander Hardy was promoted to Commander. See *The Navy Eternal*, p. 304, and *London Gazette* of July 23, 1918.

[1] This is not correct. The exact position was 2,400 yards east of the eastern pier. See the Dispatch, p. 173.

[2] M.L. 283. Lt.-Commander Keith Robin Hoare, D.S.C., R.N.V.R., received the D.S.O.; he rescued nearly all (see note 5, p. 64) the crew of *Sirius* and sixteen of the crew of *Brilliant*.

[3] M.L. 276. Lieutenant Roland Bourke, R.N.V.R., received the D.S.O.; he rescued thirty-seven officers and men from *Brilliant*.

[4] Commander Ion H. Benn, D.S.O., M.P., R.N.V.R., specially promoted to Temporary Acting Captain; was in Motor-launch 582 in one of the most inshore berths.

[5] Captain Ralph Collins, R.N., received the C.B.

[6] Lieutenant Arthur Eric Polo Welman, D.S.C., R.N., received the D.S.O.

[7] Received the C.B.

to a distance of about sixteen miles.[1] This imposes as a condition of success that the operation must be carried out at night, and not late in the night. It must take place at high water, with the wind from the right quarter, and with a calm sea for the small craft. The operation cannot be rehearsed beforehand, since the essence of it is secrecy, and though one might have to wait a long time to realize all the essential conditions of wind and weather, secrecy wears badly when large numbers of men are brought together in readiness for the attack.'

[1] This appears to be an under-statement. See the Dispatch, para. 4.

(c) *The Storming of Zeebrugge Mole.*[1]

As has been pointed out already, the attack on Zeebrugge Mole was ancillary to the blocking of Bruges Canal, the main operation, and indeed could not be justified apart from it. There was nothing on the Mole of military importance to sanction the heavy expenditure of human life its capture would entail. But the Mole's defences had it in their power to impeach or to hamper the passage of the block-ships; it was therefore imperative that they should be put out of action before the block-ships arrived. The scheme of attack projected two almost simultaneous operations—an assault upon the Mole's batteries, particularly the three 5·9's at its sea-end, by landing parties from *Vindictive* and the Liverpool ferry-boats; and the destruction of the iron viaduct in order to close the Mole against reinforcements. The latter operation was entirely successful. The former, while it failed to destroy the seaward batteries, which opened fire again as *Vindictive* and her escort withdrew, or to do as much damage as had been intended, was effective in causing a diversion during the critical period of the block-ships' passage.

Zeebrugge Mole is a mile and a half long. The leading block-ship, *Thetis*, was timed to pass the lighthouse twenty-five minutes after *Vindictive* got alongside.[2] The interval was brief, and the operations on the Mole necessarily were restricted to the critical positions which

[1] See plan at p. 110, and a detailed narrative of the operation in the Dispatch, para. 67 ff.

[2] Dispatch of May 9, para. 71.

menaced the block-ships' course towards the Canal piers. The most formidable of them was a battery of three 5·9-inch guns[1] at the sea-end of the Mole proper, and the lighter guns on the Mole extension, three of which, after the evacuation, were found to be of 4·1-inch calibre.[2] The intention was to land storming parties on the top of the 5·9 battery, and to silence it and the guns on the extension before the block-ships arrived.[3] The operation was entrusted to three companies of bluejackets, under Lieutenant-Commander Arthur L. Harrison of *Lion*.[4] Captain Henry C. Halahan was in supreme command.

The second point selected for assault was a fortified zone on the Mole about 150 yards landward of the 5·9 battery, lying to the right of the berth *Vindictive* was intended to take. Its tactical position was of great importance, since it commanded the point at which *Vindictive* was planned to berth, and its guns could bear upon her landing parties as they dropped down upon the Mole. Its capture was entrusted to the Fourth Royal Marine Battalion, organized as four companies, under Lieutenant-Colonel Bertram N. Elliot,[5] and drawn from the four divisional head-quarters and the Grand Fleet. It was equipped with four Stokes guns, one 11-inch howitzer, five pom-poms, and Lewis guns. All the crews had been specially trained, and the howitzer crews had been put through a course at Shoeburyness.[6] Having carried the fortified zone, the Marines were instructed to proceed along the Mole towards the shore and cover the operations at the sea-end against enemy troops advancing across the Viaduct. The latter's coincident destruction by submarine attack was intended to assist this result.[7]

[1] Dispatch of May 9, para. 56, 73. [2] *Ibid.*, para. 71, note.
[3] *Ibid.*, para. 71. [4] *Ibid.*, para. 68, 76.
[5] *Ibid.*, para. 67, 68. [6] *Ibid.*, para. 77. [7] *Ibid.*, para. 78.

The storming parties, having silenced the enemy's guns, were to be followed by an independent 'demolition force', whose object was to do as much damage as possible to the structures on the Mole during the transit of the block-ships to the Canal. The party was composed of a company of bluejackets, under Lieutenant Cecil C. Dickinson of *Resolution*.[1] Twenty-two rank-and-file of the R.M.L.I. were attached for the transport of the explosive equipment.[2]

In view of the short time available for the operation, and of the circumstances of darkness and confusion under which it would be carried out, those engaged upon it had received specialized training on a replica of the Mole, described to the men, with intentional inaccuracy, as 'a position in France'. To ensure success it was imperative that the topography made familiar to its assailants on the model should be encountered on the Mole itself; in other words, that the storming parties should land at the point where their assaults were to be delivered. Consequently the plan was thrown out of gear by *Vindictive*, who, owing to the difficulty of recognizing objects on the Mole, overran her assigned station and berthed about 400 yards nearer the shore than had been intended. It resulted that the storming parties were committed to their programme on a strange *terrain*, distant from the objectives for which their rehearsals had prepared them.[3]

The outer concrete wall of the Mole, as *Vindictive* berthed beside it, rose from the sea to a height of thirty feet. Along its inner side, four feet below the top, runs a ledge or parapet eight feet wide, bounded by an iron railing.[4] The surface of the Mole, over ninety feet wide,

[1] Received the D.S.O.

[2] The Dispatch, para. 69, 82.

[3] *Ibid.*, para. 70, 71.

[4] The parapet can be seen in the picture at p. 32.

lies fifteen feet below it. To facilitate landing on this formidable structure *Vindictive* was provided with a false deck on the port or landing side, and eighteen landing brows or gangways to bridge the space between the false deck and the parapet. Of this number only four remained serviceable, partly owing to severe enemy gun-fire, partly to the sawing of the brows on the parapet as the vessel rocked in the swell. The small *Iris II* was equipped with scaling ladders. She and *Daffodil* had been selected on account of their carrying capacity (1,500) and shallow draft to act as *Vindictive's* auxiliaries.[1] *Daffodil* carried two of the three parties of the demolition force,[2] which was not required on the Mole until the storming parties had prepared for it. *Iris II* carried the Chatham Company of the storming Marines[3] and D Company of the Naval storming party.[4] Both vessels landed their complements over *Vindictive*, whose initial error involved their forces in the resulting confusion. *Iris's* difficulties, already narrated, also weakened both the storming and demolition operations on the Mole. The rest of the forces were carried by *Vindictive*, and suffered much from enemy gun-fire while waiting to land. 'Perfect order prevailed,' an officer writes:[5] 'The men were lined up on deck. They fell here, there, and almost everywhere. But the instructions were that those unwounded should remain in their positions, and not one moved.'

The first to land were the A and B Companies of the Naval storming party, under Lieutenant-Commander Bryan F. Adams[6] and Lieutenant G. B. T. Chamberlain[7] respectively. They proceeded a short distance along the

[1] Dispatch of May 9, para. 34.
[2] *Ibid.*, para. 69.
[3] *Ibid.*, para. 77.
[4] *Ibid.*, para. 78.
[5] *Daily Mail*, April 25, 1918.
[6] Promoted to Commander.
[7] Killed on board.

parapet towards the sea-end of the Mole until they reached a look-out or control station having a range-finder behind and above it. Between it and the 5·9-inch battery, the Naval storming party's objective, a machine-gun was very active about 100 yards nearer. Lieutenant-Commander Adams advanced his men to a point along the parapet forty yards east of the look-out. Here his party was protected from the machine-gun, but was exposed to the fire of the two destroyers alongside the Mole, which now began to be active. A sortie in the direction of the machine-gun cost Lieutenant-Commander Harrison his life. The situation, in fact, was beyond the powers of a depleted force to cope with. A summons to the Marines farther westward was answered. But before their help could become effective the recall was sounded, and the storming parties fell back on *Vindictive*. Their ill-success was due to the cause already stated. But though they failed to capture the 5·9 battery, it is probable that their fire kept it out of action, for the block-ships passed unscathed by it.[1]

The Marine storming party's intended objective was the fortified zone which had defeated the Naval party's endeavour to reach the Mole-end battery. But as *Vindictive* berthed to landward of this zone, and as their strength was reduced by *Iris's* inability to land her detachment, the Marines turned at once to the secondary duty assigned to them—the establishment of a strong point to prevent enemy reinforcements pushing up to interfere with the work in progress at the sea-end of the Mole. They were in fact faced with a dilemma. To have attacked the fortified zone first might have given the enemy an opening to seize positions abreast *Vindictive* and exploit them with disastrous consequences. On the other hand, unless

[1] The Dispatch, para. 72–6. See plan, p. 110.

the fortified zone was reduced, the 5·9-inch battery at the Mole-end could not be prevented from obstructing the block-ships.

The first platoon to land passed along the parapet to the right, taking a direction opposite to that followed by the Naval storming party. Having silenced a body of snipers firing at the landing parties from near No. 2 Shed, the platoon reached a position some 200 yards west of *Vindictive*. Two more platoons followed and, descending to the surface of the Mole by means of rope ladders, established a strong point at the westward (shoreward) end of No. 3 Shed. Units now landed rapidly. Heavy scaling ladders were got into position, and reinforcements poured down upon the surface of the Mole to reinforce the point established near No. 3 Shed. Having secured its secondary object, the Marine force was free to dispatch reinforcements to the Naval storming party which had been brought to a standstill farther east. In conjunction with it an attack was launched upon the fortified zone. The Marines advanced as far as the look-out station. But neither they nor the Naval storming party, some forty or fifty yards east of them, were able to make headway along the exposed parapet. The general recall interrupted the attack. The attacking force fell back in good order, the sections to the west suffering from enemy fire as they climbed to the parapet by the scaling ladders.[1]

Owing to the conditions under which the storming parties worked, the demolition force's programme could not be carried out. The storming bluejackets and Marines were in such close proximity that the demolition party, for whom they had been preparing, was unable to destroy structures without endangering its own side. It

[1] The Dispatch, para. 77–81.

was on shore for fifty-five minutes, but was only able to place charges for the destruction of No. 3 Shed in case its demolition might become practicable. An attempt to place a charge alongside the destroyers was repulsed by their fire; but bombs were thrown on board.[1]

It is not surprising that the actors' accounts of a crowded and bewildering hour do little justice to its incidents and are blemished by exaggerations. After collating their statements with the Dispatch, it is necessary to discard as misleading those published in the public press on the morrow of the event.

While the storming and demolition parties were at work under baffling conditions, Sir Roger Keyes's plans were being executed with triumphant completeness at the landward end of the Mole. The object here was to prevent reinforcements passing on to the Mole across the Viaduct while the storming parties seaward were in action. The agents employed were a couple of old C class submarines—C 1 and C 3—built in 1906 and 1907 and displacing 316 tons. It was calculated that the boats, driven at a speed of six knots against the Viaduct connecting the Mole and the shore, would penetrate the light bracing of the piers up to their conning towers, a calculation exactly confirmed by the event. To enable the submarines to be abandoned at a distance and continue their course automatically, each was fitted with gyro-control, which C 3's commander, Lieutenant Richard D. Sandford, disdained to use, preferring to remain on board and make sure the accomplishment of his duty. Each submarine carried two motor-skiffs and a light scaling ladder as a means of escape to the Viaduct if other equipment failed. A picket boat, commanded by Lieutenant-Commander Francis H. Sandford, was in attendance to rescue

[1] The Dispatch, para. 82–4.

the crews if they abandoned the submarines in their motor-skiffs.

The two submarines and picket-boat approached the Mole in tow of destroyers. Owing to the parting of the tow, however, C 1 was delayed and did not reach the vicinity of the Viaduct until its destruction had been accomplished by C 3. The latter, at about a mile and a half's distance, was lit up by star-shell and became the object of a brief cannonade. At about half a mile's distance searchlights were switched on to her and were turned off again, possibly in hope that the submarine would run into the Viaduct and become a prize. At 100 yards distance course was altered to ensure striking the Viaduct end on. C 3 struck exactly between two of the lines of piers, raised her hull bodily about two feet on to the horizontal girders, and penetrated up to the conning tower. The crew lowered the motor-skiff, whose damaged propeller compelled them to use oars. The fuses on C 3 were ignited, and the skiff set off, making slow progress against the current, and under heavy fire. She was holed several times and was kept afloat only by means of a special pump. At 12.20 a.m., when the skiff was 200 or 300 yards distant, C 3 exploded, and a portion of the Viaduct was shattered to atoms. The picket-boat was sighted, and picked up the skiff's crew. Eventually *Phœbe* took them on board.[1]

An officer of one of the C.M.B.s gives an account of the event:[2]

'The submarine [C 3] which got into position and blew up the Mole went to it from the outer side. The Huns seem to have thought that she had lost her way in the dark and that her real intention was to have gone inside

[1] See the Dispatch of May 9, para. 86–91.

[2] *Daily Mail*, April 25, 1918.

the Mole in order to torpedo something. Apparently they said to themselves, "She has missed her way. Now we'll entice her in and get her."

'So they sent up star-shells in such numbers that it made the darkness just like daylight. In this way they assisted her very greatly by showing her the way to her goal. She could see them on the bridge[1] which led from the Mole to the shore.[2] Apparently they thought that they were going to trap our submarines[3] and were overjoyed at the prospect. But that was really the point she was making for.

'They pushed the submarine under this bridge and blew her up.[4] As she was loaded with explosives you can imagine what damage she did when all this cargo

[1] *i. e.* the Viaduct.

[2] 'I must tell you a curious feature of this affair. As he [Sandford] approached the Mole they got the searchlights on to him and began firing at him. That was a nasty position, because she [C 3] was stuffed full of explosives, and also had a big quantity of petrol on board. But when they saw him still coming on, and dashing straight at the Mole, they stopped firing and simply gaped. I suppose they thought he was mad. Anyway, there they stood, staring at Sandford in his submarine. Then, presently, came the explosion, and bang went the whole lot to glory!'—Statement by Captain Carpenter in Keble Howard's *The Glory of Zeebrugge*, p. 22.

[3] See *supra*, p. 74.

[4] Lieutenant Sandford, C 3's commander, states in a brief message (*Daily Mail*, April 25): 'There was no doubt about getting there. I set the fuse myself and I think the thing was done all right. We were lucky in being picked up by the picket-boat afterwards. The firing from the shore was a bit severe at 200 yards, and only the fact that the sea was a bit rough and we were up and down a good deal saved us. The crew did their duty, every man. They were all volunteers and picked men. We got in without difficulty and were not found by the searchlights until we were getting away.' The crew of six consisted of Lieutenant Sandford, R.N., Lieutenant J. Howell-Price, R.N.R., Coxswain W. Harner, Engine-room Artificer A. G. Roxburgh, Leading Seaman W. G. Cleaver, and Stoker H. C. Bindall.

went off. It blew the bridge and all the Huns standing on it right up into the air.

'By the blowing up of the bridge the Mole was isolated, and it was upon this island of a place that the *Vindictive* men landed and their fight with the Huns took place. And it was a rare fight too. Every one of our fellows who took part in it deserved a V.C.'

Stoker Bindall,[1] of Submarine C 3, gives the following account:[2]

'Lieutenant Sandford commanded, with Lieutenant Price as second in command, and with her engines running smoothly the submarine glided into the shoal waters of Zeebrugge at midnight, the whole crew of six being on deck. The Mole, looming up black in the darkness, and the Viaduct joining it to the shore were clearly seen.

'It was a silent and nervy business. She was going at full tilt[3] when we hit the Viaduct. It was a good jolt, but you can stand a lot when you hang on tight. We ran right into the middle of the Viaduct and stuck there as intended. I do not think anybody said a word except "We're here all right".

'We lowered the skiff and stood by while the commander touched off the fuse. Then we tumbled into the skiff and pushed off. We had rather a bit of bad luck. The propeller fouled the exhaust-pipe and left us with only a couple of oars and two minutes to get away.

'The lights were now on us and the machine-guns going from the shore. Before we had made 200 yards the submarine went up. We had no doubt about that.

[1] Stoker 1st Cl. Henry Cullis Bindall, received the Conspicuous Gallantry Medal.

[2] *Daily Mail*, April 25, 1918.

[3] At 9½ knots. Her surface speed was 14 knots.

There was a tremendous flash, bang, crash, and lots of concrete from the Mole fell all round us into the water. It was lucky we were not struck. Coxswain Harner and I took the oars first, till I was knocked out. Then Cleaver[1] grabbed the oar and carried on till the coxswain[2] was hit. I was hit again, and Lieutenant Price,[3] lifting me and Harner into the bows, took the oar, and was afterwards relieved by Roxburgh[4] when Lieutenant Sandford was hit. In the nick of time a picket-boat found the skiff.[5] We gave a shout of joy when we saw her. She took us on board and transferred us to another ship.'[6]

The demolition of the Viaduct at 12.20 a.m. and the successful passage of the block-ships towards the Canal accomplished the purpose for which the attack upon the Mole had been organized. The programme time for retirement had not yet been reached. But *Vindictive* was only held to the Mole by *Daffodil*, and any accident to the latter would place the storming and demolition parties in grave jeopardy. *Vindictive's* guns bearing on the Mole had been put out of action, and she herself was the target of the enemy's shore batteries. In these circumstances Captain Carpenter anticipated the Vice-Admiral's instruc-

[1] Leading Seaman William Gladstone Cleaver, received the Conspicuous Gallantry Medal.

[2] Petty Officer Walter Harner, received the Conspicuous Gallantry Medal.

[3] Lieutenant John Howell-Price, D.S.C., R.N.R., received the D.S.O.

[4] Engine-room Artificer Allan Gordon Roxburgh, received the Conspicuous Gallantry Medal.

[5] The picket-boat was commanded by Lieutenant-Commander Francis H. Sandford, D.S.O., who undertook to save his brother and crew. He was promoted to Commander.

[6] H.M.S. *Phoebe*, which, with Sir Roger Keyes in *Warwick* and *North Star*, had been close inshore by the Mole during the operation.

tions and resolved to cast-off. At 12.50 a.m. *Daffodil's* siren—*Vindictive's* having been destroyed—signalled the Mole parties to return. At 1.5 a.m. it was reported that officers and men had ceased coming on board. At 1.10 a.m. *Daffodil* began to tow *Vindictive's* bow from the Mole. At 1.15 a.m. she was clear and got off without damage from the sea-end batteries, whose crews returned to their guns upon the retirement of the landing parties and inflicted heavy casualties upon *Iris II* as she left the Mole. She did not reach Dover until 2.45 p.m.

Vindictive, in her heroic disarray, had arrived six hours earlier.[1] Sir Roger Keyes already had marked her to remedy the only serious failure in the operations of St. George's Day. For long Ostend had been of little value to the enemy, and of no value as a base. Under stress of continual bombardment he had transferred plant and docks—except one—to Bruges, and had organized the latter as an exceedingly well-equipped base. The failure of *Sirius* and *Brilliant* on April 23 left Bruges still available for the purposes to which the enemy had adapted it. To deny him these facilities, and to prevent his numerous craft blocked at Bruges from escaping to sea, the sealing of Ostend Harbour was essential. On May 10 Sir Roger Keyes delivered a second stroke to achieve it.

[1] See the Dispatch, para. 103–5.

(*d*) *The German Admiralty's Account.*

Issued by the 'Chief of the Admiralty Staff of the Navy' from Berlin on April 24, the German version of St. George's Day Raid is, as *The Times* of the following day described it, 'a fine example in the *camouflage* of disagreeable news':

'During the night of April 22–3 an enterprise of the British naval forces against our Flanders bases, conceived on a large scale and planned regardless of sacrifice, was frustrated.

'After a violent bombardment from the sea, small cruisers, escorted by numerous destroyers and motor-boats, under cover of a thick veil of artificial fog, pushed forward near Ostend and Zeebrugge to quite near the coast, with the intention of destroying the locks and harbour works there. According to the statements of prisoners, a detachment of four Companies of the Royal Marines was to occupy the Mole of Zeebrugge by a *coup de main*, in order to destroy all the structures, guns, and war material on it and the vessels lying in the harbour. Only about forty of them got on the Mole. These fell into our hands, some alive, some dead. On the narrow high wall of the Mole both parties fought with the utmost fierceness.

'Of the English naval forces which participated in the attack the small cruisers *Virginia* [*sic*], *Intrepid*, *Sirius* and two others of similar construction, whose names are unknown,[1] were sunk close off the coast. Moreover, three torpedo-boat destroyers and a considerable number

[1] H.M.S. *Thetis* and *Brilliant*.

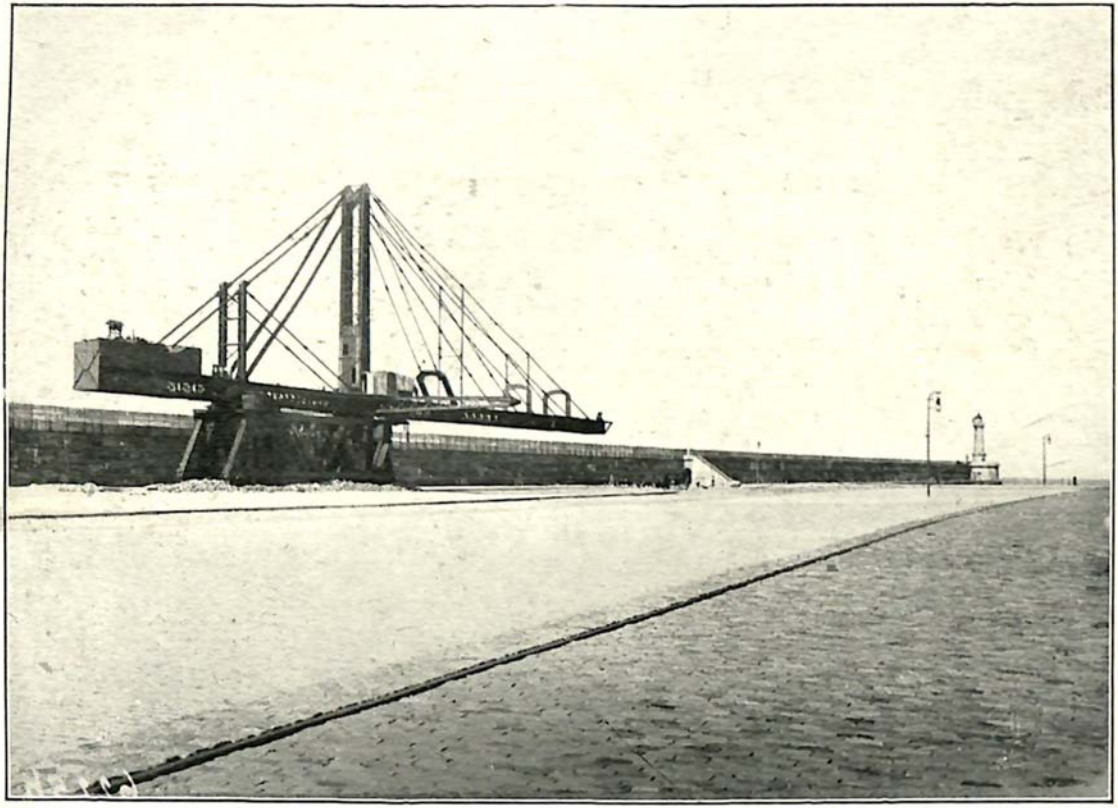
of torpedo motor-boats were sunk by our artillery fire.[1] Only a few men of the crews could be saved by us.[2]

'Beyond damage caused to the Mole by a torpedo [*sic*] hit, our harbour-works and coast batteries are quite undamaged. Of our naval forces only one torpedo-boat suffered damage of the lightest character.[3] Our casualties are small.'

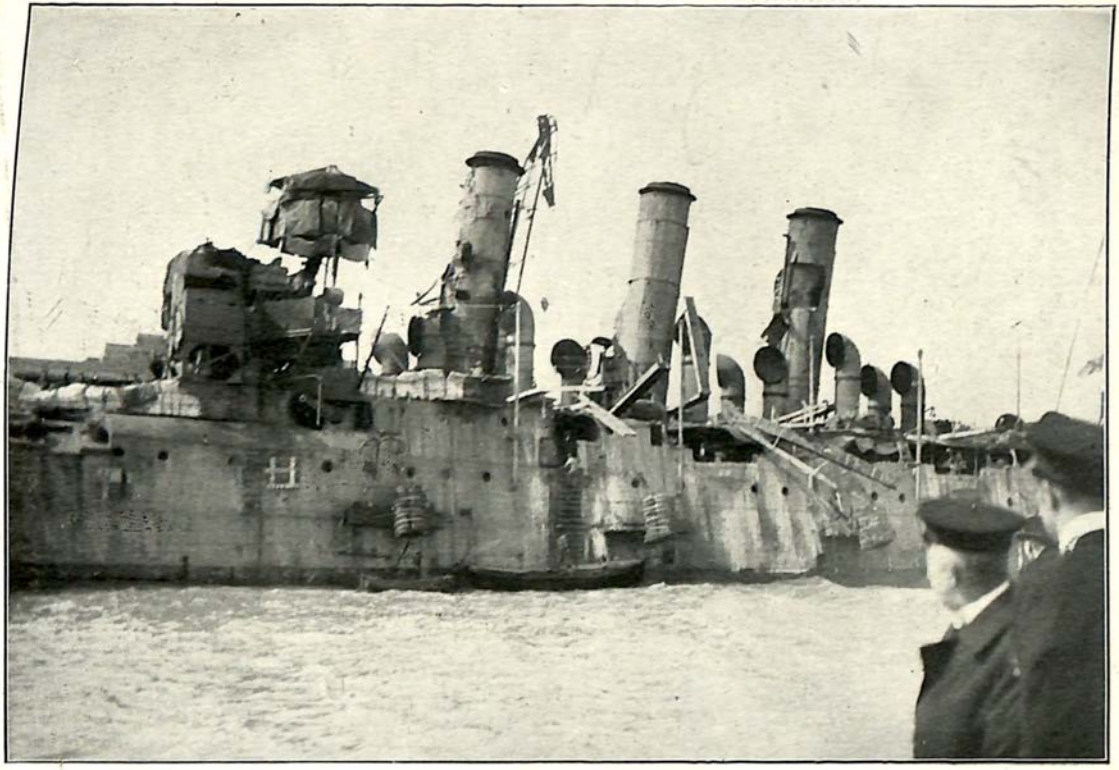
[1] British losses, other than the block-ships and submarine, were one destroyer (*North Star*) sunk by gunfire off the Mole, and two motor-launches (Nos. 110, 424). No other vessels were rendered unfit for further service

[2] See the Press Bureau account *supra*, p. 63.

[3] One of the two destroyers alongside the Mole was torpedoed by C.M.B. 7. Another, escaping from the harbour, was hit by C.M.B. 5.



THE MOLE EXTENSION AND VIADUCT, ZEEBRUGGE



H.M.S. *VINDICTIVE* AFTER THE RAID, SHOWING THE BROWS

III

THE OSTEND RAID, MAY 10, 1918

On April 26 the Lords of the Admiralty issued an Order to the Fleet: 'Their Lordships desire to express to all ranks and ratings concerned in the recent gallant and successful enterprise on the Belgian coast their high admiration of the perfect co-operation displayed and of the single-minded determination of all to achieve their object. The disciplined daring and singular contempt of death places this exploit high in the annals of the Royal Navy and Royal Marines, and will be a proud memory of the relatives of those who fell.'[1] Admiral Fournier, sometime Minister of the French Marine, generously praised the attack on Zeebrugge as 'the finest feat of arms in the naval history of all times and all countries'.[2] 'The whole undertaking', declared the Dutch *New Courant* of April 24, 'shows that the British Navy in nowise lacks dare-devil pluck.'

In some quarters, *e.g.* the *New York Times* of April 24, the event was greeted as 'a welcome departure inaugurating a more aggressive naval policy'. Ill-informed criticism complained that the operation ought to have been undertaken long ago, and that the Admiralty in the past had been remiss in not attempting it. The indictment indicates neglect to correlate the

[1] The casualties were: killed, 176; wounded, 412; missing, 49, of whom 35 are believed to have been killed. Total = 637.

[2] *The Times*, May 13, 1918.

naval and military situations.[1] The Allies had looked forward to the campaign of 1917 to gain a decision on the Western front which should yield them possession of the Belgian coast. But the Russian collapse compelled the plans of 1917 to be completely redrafted. The prospect of an early recovery of the Flemish coast receded, and the Navy, once more denied the co-operation of the Army, addressed itself to render useless to the enemy ports from which there was no immediate hope of his removal. The changed military situation and not solely the substitution of active for lethargic control at the Admiralty dictated the attacks on Ostend and Zeebrugge.[2]

The results achieved by the operations on April 23 proved to be more considerable than had been at first supposed. On May 9, the eve of their repetition, aerial observation established that not only was the Bruges–Zeebrugge Ship Canal blocked, but that even the lighter craft in Bruges Docks were unable to find an exit through the smaller waterways to Ostend Harbour. After April 23 at least twenty-three torpedo craft remained sealed up at Bruges. Not less than twelve submarines were imprisoned there also. At Zeebrugge no effective steps had been taken to clear the obstructing block-ships from the canal.[3] Even in normal conditions constant dredging is needed to cope with the silt and preserve the artificial harbour against the operations of Nature which have built up the Flemish coast. But the three sunken cruisers, displacing more than 10,000 tons of water, not only impeded the process of dredging, but assisted the unceasing assault of Nature on man's handiwork. Their

[1] See an article by Lieut.-Colonel Repington in the *Morning Post*, April 27, 1918, and cf. Pollen, *The Navy in Battle* (1919), p. 367.

[2] See Lord Jellicoe, *The Grand Fleet, 1914–1916*, p. 155.

[3] See the Dispatch of May 9, General Summary, para. 12.

removal by explosive force was forbidden out of regard for the surrounding structure, and the unremitting vigilance of aircraft impeached the enemy from attempting to shift their position. Until Germany's evacuation of the Belgian coast in the following autumn, the three vessels remained where their heroic crews left them. A photograph, taken at low tide from the base of the wharf on the west side of the canal, published by the Admiralty on September 19,[1] proves the fact conclusively and establishes the success of the operations on St. George's Day so far as the sealing of Zeebrugge is concerned.

The craft shut up at Bruges presumably were able to reach the sea by the alternative exit at Ostend. And the port, owing to the failure of *Sirius* and *Brilliant* on April 23, was still used by incoming enemy torpedo craft and submarines. The former, moreover, were reinforced by destroyers from the Bight, brought down to the Flanders coast to replace those in Bruges.[2] Hence, when he learnt, on April 23, that the attempt to block Ostend had not succeeded, Sir Roger Keyes represented to the Admiralty the desirability of repeating the operation at once. The quicker the delivery of the new attack, the greater the element of surprise and consequent probability of success. *Vindictive*, the only vessel available as a block-ship, was forthwith devoted to that service. About four days still remained during which the coincidence of high tide and darkness at Ostend permitted the operation to be undertaken. Within that period *Vindictive* was completed at Dover. Her after magazines and upper bunkers on both sides were filled with 200 tons of wet

[1] It is reproduced at p. 144. The Germans are reported to have endeavoured to dig the channel deeper, with a view to the obstructions becoming farther embedded.

[2] Dispatch of June 15, para. 6, 7.

cement, the maximum weight she could carry in view of the depth of water in the approaches to Ostend Harbour. The officers of *Sirius* and *Brilliant* begged to be employed. As Commander A. E. Godsal of *Brilliant* had led the attempt on April 23, he and his officers were chosen. *Vindictive's* old engine-room staff—Engineer Lt.-Commander William A. Bury and four artificers—pleaded their intimate knowledge of the cruiser's engines, and also were accepted on her last commission. Lieutenant Sir John Alleyne, who had been employed in refitting her navigational arrangements, was selected to navigate her. Her crew were volunteers from vessels of the Dover Patrol.[1]

Vindictive was in all respects ready for sea by the desired date. But a spell of bad weather set in. Strong northerly gales raised rough seas, in which the small motor craft could not operate. The attack consequently was postponed until the necessary conjunction of high tide and darkness recurred, a period which opened on the night of May 9–10. The delay made it possible to prepare a second block-ship, the obsolescent *Sappho*, a light cruiser of the *Sirius* and *Brilliant* class,[2] whose failure she was intended to make good. She was forthwith equipped at Chatham. The officers of *Sirius* received the command, and volunteers from the Chatham Royal Naval Barracks provided her crew.[3]

The enforced postponement permitted Commodore Lynes, to whom Sir Roger Keyes again entrusted the general command, to perfect the arrangements for ensuring the block-ships' certain access to their goal.

[1] Sir Roger Keyes's Dispatch of June 15, para. 2, 3.

[2] Completed in 1893; displacement 3,400 tons.

[3] Dispatch of June 15, para. 4, 5; Commodore Lynes's Report, para. 9–11.

Small, but important, improvements were introduced into the smoke gear, and so many alternatives were provided for guiding the block-ships to the harbour entrance that the chance of failure was reduced to the smallest dimensions. The preliminary staff-work also included precise orders for laying the smoke-screen, with plans calculated for every direction of the wind.[1] It was necessary to assume that the enemy, instructed by his experience on April 23, would be on the alert to make counter-preparations against an exactly similar attack. While following the original scheme in its general outline, therefore, the smoke gear was improved, and the small craft were reorganized in accordance with new and alternative plans of attack. In particular, it was determined that there should be no preliminary bombardment by the monitors and Flanders batteries or by the Air Force.[2]

The enemy, on his side, had made special preparations in anticipation of a renewed attack.[3] A considerable number of his destroyers had been called down from the Bight to reinforce the crippled Flanders force.[4] The deep-draught route from Ostend to seaward had been mined, a precaution which almost succeeded in sinking Sir Roger Keyes and his flagship.[5] Gaps had been cut in the piers as a precaution against a landing,[6] and the buoys had been removed. On the other hand, as on April 23, the enemy's measures against surprise did not include the use of patrol craft in the offing, though nine of his destroyers were out on May 9.[7]

[1] Press Bureau Narrative, *infra*, p. 93.
[2] Commodore Lynes, para. 5–7, 18.
[3] Sir Roger Keyes's Dispatch of July 24, para. 2, 3.
[4] Dispatch of June 15, para. 7.
[5] *Ibid.*, para. 15. [6] Press Bureau Narrative, *infra*, p. 92.
[7] Commodore Lynes, para. 12, 17.

The night of May 9–10 opened a new conjunction of darkness and high tide, and invited the postponed attack. By good fortune weather conditions on the 9th were promising, after days of rain, cloud, and mist which prevented more than the scantiest air reconnaissance. On the afternoon of the 9th, therefore, *Sappho* proceeded to Dover, whence, at 6 p.m., in company with *Vindictive* and their escorts, she steamed to Dunkirk. The cruisers anchored there after dark. Meanwhile, towards sunset, an air reconnaissance revealed the fact that the Stroom Bank buoy marking the channel into Ostend Harbour had been removed. It was arranged to replace it by a special calcic-phosphide light-buoy,[1] a device which promised a satisfactory departure-point for the block-ships and smoke-laying craft. As the afternoon advanced the weather conditions continued to be propitious. The wind, N. by W., blew from the right direction to carry the fog-screen ahead of the block-ships; the sea was smooth for the small craft, the sky clear, barometer steady, and atmosphere good for air observation and navigation.[2]

At midnight the block-ships and the small craft—M.L.s and C.M.B.s—with the Commodore in H.M.S. *Faulknor* —set out towards Ostend. Midway between Ostend and Zeebrugge a division of destroyers—H.M.S. *Warwick* flying Sir Roger Keyes's flag, *Whirlwind*, *Velox*, and *Trident*—cruised in order to prevent interference from Zeebrugge by the enemy destroyer force recently arrived from the Bight.[3] Monitors took their stations out at sea ready to open fire at a signal. Squadrons of the R.A.F.

[1] The buoy was laid by H.M.S. *Faulknor*, flying the Commodore's broad pennant. See Press Bureau Narrative, *infra*, p. 92.

[2] Commodore Lynes, para. 11, 12, 13.

[3] Dispatch of June 15, para. 9.

attached to the Dover Patrol were detailed to bomb the port from the air, and the heavy batteries of the Royal Marine Artillery in Flanders were ready to co-operate.

At the outset an ill-timed accident threatened a further postponement. Hardly had the block-ships left Dunkirk Roads when *Sappho's* speed was reduced to about six knots by the blowing out of a man-hole joint in the side of her boiler. Her participation in the operation was out of the question. The reduction in the blocking material was serious. Commodore Lynes, however, decided to proceed with *Vindictive* alone,[1] and the event justified his decision.

By 1.30 a.m. (May 10) preliminary dispositions were completed, and the C.M.B.s and M.L.s steamed inshore towards Ostend to carry out their several duties. No patrol craft were encountered, and occasional star-shells and 'flaming onions' alone indicated the enemy's alertness against surprise. At 1.35 a.m. a searchlight peered out to sea, where the C.M.B.s were already running their smoke-screens. At 1.43 a.m., seventeen minutes before *Vindictive* was due at the harbour mouth, the Commodore signalled 'open fire'. Simultaneously a storm of bombs and shells from monitors, land batteries, and air-planes burst upon the enemy, while a couple of C.M.B.s raced forward and torpedoed the piers. Five minutes later (1.50 a.m.) the sky suddenly became overcast. A thick sea-fog settled down over the harbour's approaches, and for a critical hour the ships engaged in the operation kept in touch by sound alone. The fog, happily, was local. It neither reached the monitors to the westward nor prevented the airmen from continuing their attacks above it.[2]

[1] Commodore Lynes, para. 14, 15.
[2] Commodore Lynes, para. 17–21.

Meanwhile, a heavy and continuous barrage-fire across the entrance to Ostend Harbour showed that the enemy already realized the nature of the attack. While the monitors came as close inshore as was feasible to bring their secondary armaments to bear, the offshore destroyer force was directed to fire star-shell to light up the entrance, and to pound the land batteries in order to divert their attention from the approaching block-ship. Passing at 1.39 a.m. the calcic-phosphide buoy laid by the Commodore,[1] *Vindictive* had before her a critical twenty minutes before the harbour mouth was reached. Only half of it was traversed when the fog settled down. Punctually at 2 a.m.[2] the old ship arrived at the point where she expected to make the entrance. Twenty minutes elapsed before she found it. Visibility was reduced to 200 or 300 yards, and nothing could be seen.[3]

Failing to sight the entrance, *Vindictive* altered course to the westward and reduced speed. As the entrance was still not visible, she went about to eastward and returned along the shore. Once more the goal eluded her. Again altering course to westward, the entrance at length was sighted about one cable[4] distant on the port beam. Immediately the ship came under very heavy fire from the shore batteries. Commander Godsal and his officers proceeded to the conning-tower. The signal was passed to the engine-room 'preparatory, abandon

[1] The time is deduced from the Press Bureau Narrative (*infra*), which states that *Vindictive* made the light-buoy four minutes before the signal was given to open fire.

[2] Lieutenant Crutchley's Report (Dispatch of June 15, para. 10) states that *Vindictive* proceeded for thirteen minutes after passing the light-buoy before arriving at where she expected to find the entrance. She must have reached that point at 1.52 a.m. therefore.

[3] Commodore Lynes, para. 22–24.

[4] 200 yards.

ship',[1] and her C.M.B. escort received the 'last resort'. Immediately C.M.B. No. 23 (Lieutenant the Hon. Cecil E. R. Spencer)[2] laid and lit a million candle-power 'Dover flare' to light up the entrance, while C.M.B. No. 25 (Lieutenant Russell H. McBean) and C.M.B. No. 26 (Lieutenant Cuthbert F. B. Bowlby) torpedoed the piers and attacked the machine-guns upon them.[3]

The heavy fire to which *Vindictive* was subjected severed the communication between the conning-tower and the after control.[4] So soon as the entrance was passed Commander Godsal went outside the conning-tower to give the necessary directions for placing the ship in her blocking position. He had just made the order 'hard-a-starboard' when a heavy shell killed him, severely wounded Lieutenant Alleyne, and left Lieutenant Crutchley to take command.[5]

Commander Godsal's intention had been to ram the western pier[6] and, taking advantage of a strong eastward tide running through the piers, to swing the ship across the channel under port helm. But when she actually found the entrance, *Vindictive* was too close to the eastern pier to use port helm without incurring the risk of grounding broadside on. Hence the Commander's order 'hard-a-starboard' a few seconds before he was killed. In the circumstances Lieutenant Crutchley promptly put the port telegraph to 'full speed astern'. But the port propeller was of little value; it had been severely damaged

[1] Lieutenant Crutchley's Report, *infra*, p. 182.

[2] Commander Lynes, para. 29. The Press Bureau Narrative wrongly attributes this deed to C.M.B. 22.

[3] Commodore Lynes, para. 24, 29.

[4] See the Press Bureau Narrative, p. 97.

[5] Commodore Lynes, para. 25; Lieutenant Crutchley's Report, *infra*, p. 183.

[6] *i. e.* that on his right looking forward.

against the Mole. For that reason, and because the tide was strong against her starboard side, *Vindictive* failed to swing across the channel as desired. The charges were fired, and she grounded at an angle of about 25 degrees to the eastern pier, leaving a considerable channel between her stern and the western pier.[1] She sank soon after 2.49 a.m.[2]

At 2.30 a.m., in accordance with the programme, rockets were fired from the flagship recalling the small craft.[3] Fifteen minutes later H.M.S. *Warwick* and her attendant destroyers proceeded slowly to the westward parallel to the coast, and at 3.15 a.m. observed a signal of distress from the direction of Ostend. It proceeded from M.L. 254, conveying the greater number of *Vindictive's* rescued crew. M.L. 276 brought in three more to Dunkirk. Half an hour was exhausted in transferring the wounded from M.L. 254 to the flagship. Dawn was breaking. The tide had fallen so low that it was inexpedient to return by the route inside the shoals, by which the approach had been made, and necessary to use the deep-draught route from Ostend seaward. At 4 a.m. H.M.S. *Warwick* struck a mine which destroyed the after part of the ship. She took a heavy list and appeared to be settling down. The wounded were transferred to *Velox*, and *Whirlwind* took the flagship in tow. *Velox* was lashed alongside to steer. Progress was slow and for three hours the destroyers were within range of the enemy's batteries. Dover was reached at 4.30 p.m. on May 10.[4] The retirement of the Dunkirk contingent was executed without casualties or incident.[5]

[1] Sir Roger Keyes's Dispatch of June 15, para. 11.

[2] See p. 105, *infra*.

[3] Press Bureau Narrative, *infra*, p. 102.

[4] Dispatch of June 15, para. 12-15; Commodore Lynes, para. 28.

[5] Commodore Lynes, para. 31.

(a) *The Press Bureau Narrative.*[1]

'*Dunkirk, May* 11, 1918.

'The *Sirius* lies in the surf some 2,000 yards east of the entrance to Ostend Harbour, which she failed so gallantly to block [on April 23]; and when, in the early hours of yesterday morning [May 10], the *Vindictive* groped her way through the smoke-screen and headed for the entrance, it was as though the old fighting ship awoke and looked on. A coastal motor-boat had visited her and hung a flare in her slack and rusty rigging; and that eye of unsteady fire, paling in the blaze of the star-shells, or reddening through the drift of the smoke, watched the whole great enterprise, from the moment when it hung in doubt to its ultimate triumphant success.

'The planning and execution of that success had been entrusted by the Vice-Admiral, Sir Roger Keyes, to Commodore Hubert Lynes, C.M.G.,[2] who directed the previous attempt to block the harbour with *Sirius* and *Brilliant*. Upon that occasion a combination of unforeseen and unforeseeable conditions had fought against him;[3] upon this, the main problem was to secure the effect of a surprise attack upon an enemy who was clearly, from his ascertained dispositions, expecting him.[4]

[1] *The Times*, May 15, 1918, and *The Glory of Zeebrugge*, pp. 55 ff. For the official accounts see the Dispatch of June 15 and Commodore Lynes's Report, *infra*.

[2] Commanding at Dunkirk. The Commodore directed the operations on board H.M.S. *Faulknor*.

[3] His Report (para. 3) attributes his failure partly to the sudden change of wind which blew the smoke-screens across the harbour at the critical moment, chiefly to the displacement of the Stroom Bank buoy.

[4] See *supra*, p. 85, on the steps taken by the enemy in anticipation of a renewed attack.

Sirius and *Brilliant* had been baffled [on April 23] by the displacement of the Stroom Bank buoy,[1] which marks the channel to the harbour entrance. But since then aerial reconnaissance [2] had established that the Germans had removed the buoy altogether, and that there were now no guiding marks of any kind. They had also cut gaps in the piers as a precaution against a landing; and, further, when towards midnight on Thursday [May 9] the ships moved from their anchorage, it was known that some nine German destroyers were out and at large upon the coast.[3] The solution of the problem is best indicated by the chronicle of the event.

'It was a night that promised well for the enterprise—nearly windless, and what little breeze stirred came from a point or so west of north; a sky of lead-blue, faintly star-dotted, and no moon; a still sea for the small craft, the motor-launches and the coastal motor-boats, whose work is done close inshore. From the destroyer [4] which served the Commodore for flagship the remainder of the force was visible only as swift silhouettes of blackness, destroyers bulking like cruisers in the darkness, motor-launches like destroyers, and coastal motor-boats showing themselves as racing hillocks of foam. From Dunkirk a sudden and brief flurry of gunfire announced that German aeroplanes were about—they were actually on their way to visit Calais; and over the invisible coast of Flanders the summer-lightning of the restless artillery rose and fell monotonously.[5]

[1] See note 3 on p. 91, *supra*.

[2] Towards sunset on May 9. See Commodore Lynes, para. 12.

[3] See the Dispatch of June 15, para. 7.

[4] H.M.S. *Faulknor*.

[5] The absence of enemy patrols in the offing is commented on by Commodore Lynes, para. 17.

'"There's *Vindictive*!" The muffled seamen and Marines standing by the torpedo tubes and the guns turned at that name to gaze at the great black ship, seen mistily through the streaming smoke from the destroyer's funnels, plodding silently to her goal and her end. Photographs have made familiar that high-sided profile and the tall funnels with their Zeebrugge scars, always with a background of the pier at Dover against which she lay to be fitted for her last task. Now there was added to her the environment of the night, and the sea, and the greatness and tragedy of her mission.

'She receded into the night astern as the destroyer raced on to lay the light-buoy[1] that was to be her guide, and those on board saw her no more. She passed thence into the hands of the small craft, whose mission it was to guide her, light her, and hide her in the clouds of the smoke-screen.

'There was no preliminary bombardment of the harbour and the batteries as before the previous attempt; that was to be the first element in the surprise. A time-table had been laid down for every stage of the operation; and the staff-work beforehand had even included precise orders for the laying of the smoke barrage, with plans calculated for every direction of wind.[2] The monitors, anchored in their firing positions far to seaward, awaited their signal; the great siege batteries of the Royal Marine Artillery in Flanders—among the largest guns that have ever been placed on land-mountings—stood by likewise to neutralize the big German artillery along the coast; and the airmen who were to collaborate with an aerial bombardment of the town waited somewhere in

[1] See Commodore Lynes, para. 12.

[2] See *supra*, p. 85, on the preparations made for the operations on May 10.

the darkness overhead. The destroyers[1] patrolled to seaward of the small craft.

'The *Vindictive*, always at that solemn gait of hers, found the flagship's light-buoy,[2] and bore up for where a coastal motor-boat, commanded by Lieutenant William R. Slayter, R.N., was waiting by a calcium flare upon the old position of the Stroom Bank buoy.[3] Four minutes before she arrived there, and 15 minutes only before she was due at the harbour mouth, the signal for the guns to open was given.[4] Two motor-boats, under Lieutenant Dayrell-Reed, R.N.R.,[5] and Lieutenant Albert L. Poland, R.N.,[6] dashed in towards the ends of the high wooden piers and torpedoed them. There was a machine-gun on the end of the western pier, and that vanished in the roar and the leap of flame and *débris* which called to the guns. Over the town a flame suddenly appeared high in air and sank slowly earthwards—the signal that the aeroplanes had seen and understood; and almost coincident with their first bombs came the first shells whooping up from the monitors at sea. The surprise part of the attack was sprung.

'The surprise, despite the Germans' watchfulness, seems to have been complete. Up till the moment when the torpedoes of the motor-boats exploded there had not been

[1] Besides the Dunkirk destroyers, H.M.S. *Warwick*, *Velox*, *Whirlwind*, *Trident* were cruising between Zeebrugge and Ostend in order to prevent the newly arrived enemy destroyers (*supra*, p. 85) from interfering with Commodore Lynes's force. See the Dispatch of June 15, para. 9.

[2] At 1.39 a.m.

[3] The flare was hidden from the shore by the smoke-screen.

[4] At 1.43 a.m. G.M.T., Commodore Lynes, para. 19.

[5] C.M.B. No. 24. Lieutenant Archibald Dayrell-Reed, D.S.O., R.N.R.; received a bar to the D.S.O.

[6] C.M.B. No. 30. Lieutenant Albert Lawrence Poland, R.N.; received the Distinguished Service Cross.

a shot from the land—only occasional routine star-shells. The motor-launches were doing their work magnificently.[1] These pocket-warships, manned by officers and men of the Royal Naval Volunteer Reserve, are specialists at smoke production; they built to either hand of the *Vindictive's* course the likeness of a dense sea-mist driving landward with the wind. The star-shells paled and were lost as they sank into it; the beams of the searchlights seemed to break off short upon its front. It blinded the observers of the great batteries when suddenly, upon the warning of the explosions, the guns roared into action.

'There was a while of tremendous uproar. The coast about Ostend is ponderously equipped with batteries, each with its name known and identified—Tirpitz, Hindenburg, Deutschland, Cecilia, and the rest. They register from six inches up to monsters of 15-inch naval pieces in land-turrets, and the Royal Marine Artillery fights a war-long duel with them. These now opened fire[2] into the smoke and over it at the monitors; the Marines and the monitors replied; and meanwhile the aeroplanes were bombing methodically and the anti-aircraft guns were searching the skies for them. Star-shells spouted up and floated down, lighting the smoke banks with spreading green fires; and those strings of

[1] They began their smoke-laying operations at 1.30 a.m. so successfully that *Vindictive* was only hit by shrapnel on her way to the harbour entrance. See Lieut. Crutchley's Report, *infra*, p. 182.

[2] A writer in *The Times* of May 11, relying on 'authoritative statements made to me this [May 10] afternoon and extracts from the report of Commodore Hubert Lynes', states that the enemy began firing 'about 1.45 a.m.' G.M.T. See Commodore Lynes, para. 22. *Vindictive* was due to arrive at the harbour entrance at 2 a.m. Enemy fire continued almost without cessation until 3 a.m.

luminous green balls, which airmen call "flaming onions",[1] soared up to lose themselves in the clouds. Through all this stridency and blaze of conflict the old *Vindictive*, still unhurrying, was walking the lighted waters toward the entrance.

'It was then that those on the destroyers became aware that what had seemed to be merely smoke was wet and cold, that the rigging was beginning to drip, that there were no longer any stars—a sea-fog had come on.[2]

'The destroyers had to turn on their lights and use their sirens to keep in touch with each other; the air attack was suspended,[3] and *Vindictive*, with some distance yet to go, found herself in gross darkness.

'There were motor-boats [4] to either side of her, escorting her to the entrance, and these were supplied with what are called "Dover flares"—enormous lights capable of illuminating square miles of sea at once.[5] A "Véry" pistol was fired as a signal to light these, but the fog and the smoke together were too dense for even the flares. The *Vindictive* then put her helm over and started to cruise to find the entrance. Twice in her wanderings she must have passed across it, and at her third turn, upon reaching the position at which she had first lost her way, there came a rift in the mist, and she saw the entrance clear,[6] the piers to either side, and the

[1] See note 4 on p. 64, *supra*.

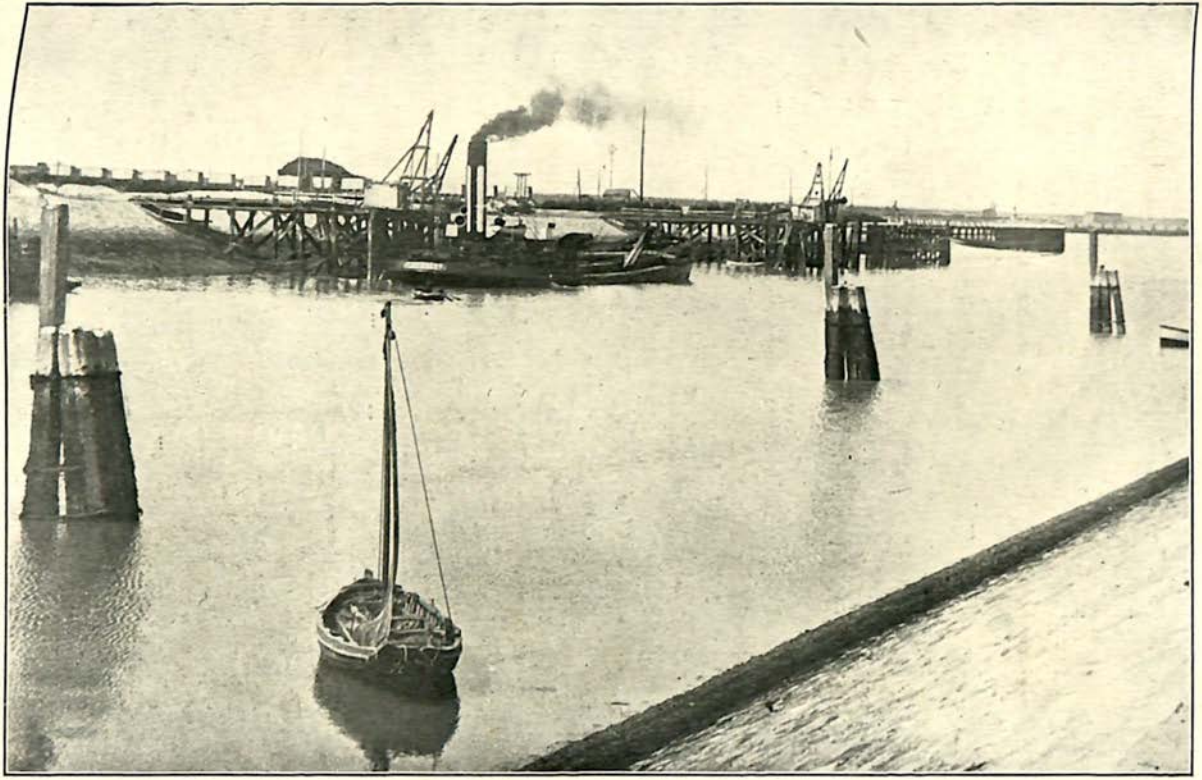
[2] At 1.50 a.m. G.M.T. See Commodore Lynes, para. 20.

[3] In fact, the fog was sufficiently low lying to permit the air attacks to continue. See Commodore Lynes, para. 21.

[4] C.M.B.s Nos. 23, 25, 26 escorted *Vindictive* to the entrance. See Commodore Lynes, para. 29.

[5] They were of one million candle-power. See Commodore Lynes, para. 29.

[6] At 2.20 a.m. G.M.T. See Lieut. Crutchley's Report.



THE CANAL ENTRANCE, ZEEBRUGGE

opening dead ahead.[1] The inevitable motor-boat dashed up (No. 22,[2] commanded by Acting Lieutenant Guy L. Cockburn, R.N.), raced on into the opening under a heavy fire, and planted a flare on the water between the piers. *Vindictive* steamed over it and on. She was in.

'The guns found her at once. She was hit every few seconds after she entered, her scarred hull broken afresh in a score of places, and her decks and upper works swept. The machine-gun on the end of the western pier had been put out of action by the motor-boat's torpedo, but from other machine-guns at the inshore ends of the pier, from a position on the front, and from machine-guns apparently firing over the eastern pier, there converged upon her a hail of lead. The after-control was demolished by a shell which killed all its occupants, including Sub-Lieutenant Angus H. Maclachlan,[3] who was in command of it. Upper and lower bridges and chart-room were swept by bullets, and Commander Godsal, R.N.,[4] ordered his officers[5] to go with him to the conning-tower.

'They observed through the observation slit in the steel wall of the conning-tower that the eastern pier was breached some 200 yards from its seaward end, as

[1] Lieutenant Crutchley says the entrance was observed about one cable's distance on the port beam.

[2] This is incorrect. The deed is attributed to C.M.B. No. 28. Her commander, Lieut. the Hon. Cecil E. R. Spencer, R.N., was awarded the D.S.C. See Commodore Lynes, para. 29.

[3] He was in *Brilliant* as Sub-Lieutenant in the former Raid; specially promoted to Lieutenant for his services in that action; 'mentioned' in Sir Roger Keyes's Dispatch of July 24, p. 201.

[4] Commander Alfred E. Godsal, D.S.O., R.N.; 'mentioned' in the Dispatch of July 24; commanded *Brilliant* on April 23.

[5] Lieutenant Sir John Meynell Alleyne, Bart., D.S.C., R.N., and Lieutenant Victor Alexander Charles Crutchley, D.S.C., R.N. The latter served in *Brilliant* on April 23.

though at some time a ship had been in collision with it. They saw the front of the town silhouetted again and again in the light of the guns that blazed at them; the night was a patchwork of fire and darkness. Immediately after passing the breach in the pier, Commander Godsal left the conning-tower and went out on deck, the better to watch the ship's movements. He chose his position, and called in through the slit of the conning-tower his order to starboard the helm. The *Vindictive* responded; she laid her battered nose to the eastern pier, and prepared to swing her 320 feet of length across the channel.[1]

'It was at that moment that a shell from the shore batteries struck the conning-tower. Lieutenant Sir John Alleyne [R.N.][2] and Lieutenant V. A. C. Crutchley, R.N.,[3] were still within; Commander Godsal was close to the tower outside. Lieutenant Alleyne was stunned by the shock[4]; Lieutenant Crutchley shouted through the slit to the Commander, and, receiving no answer, rang the port engine full speed astern to help in swinging the ship. By this time she was lying at an angle of about 40 deg. to the pier,[5] and seemed to be hard and fast, so that it was impossible to bring her farther round. After working the engines for some minutes to no effect, Lieutenant Crutchley gave the order to clear the engine-room and abandon ship, according to the programme previously laid down. Engineer Lieutenant-Commander

[1] On this important matter see the Dispatch of June 15, para. 10, 11.

[2] Received the D.S.O. See the Dispatch of June 15, para. 8.

[3] Received the V.C. 'for great bravery both in *Vindictive* and M.L. 254'.

[4] He was severely wounded in the stomach.

[5] In fact she grounded at an angle of about 25 deg. to the eastern pier. See the Dispatch of June 15, para. 11.

William A. Bury [R.N.],[1] who was the last to leave the engine-room, blew the main charges by the switch installed aft; Lieutenant Crutchley blew the auxiliary charges in the forward 6-in. magazine from the conning-tower. Those on board felt the old ship shrug as the explosive tore the bottom plates and the bulkheads from her; she sank about six feet, and lay upon the bottom of the channel. Her work was done.[2]

'It is to be presumed that Commander Godsal was killed by the shell which struck the conning-tower. Lieutenant Crutchley, searching the ship before he left her, failed to find his body, or that of Sub-Lieutenant Maclachlan, in that wilderness of splintered wood and shattered steel. In the previous attempt to block the port, Commander Godsal had commanded *Brilliant*, and, together with all the officers of that ship and of *Sirius*, had volunteered at once for a further operation. Engineer Lieutenant-Commander Bury, who was severely wounded, had been in *Vindictive* in her attack on the Zeebrugge Mole; he had urged upon the Vice-Admiral his claim to remain with her, with four Engine-room Artificers, in view of his and their special knowledge of her engines. The names of these four are as follows: H. Cavanagh, H.M.S. *Vindictive*,[3] wounded; N. Carroll,[4] Royal Naval Barracks, Chatham, wounded; A. Thomas,[5]

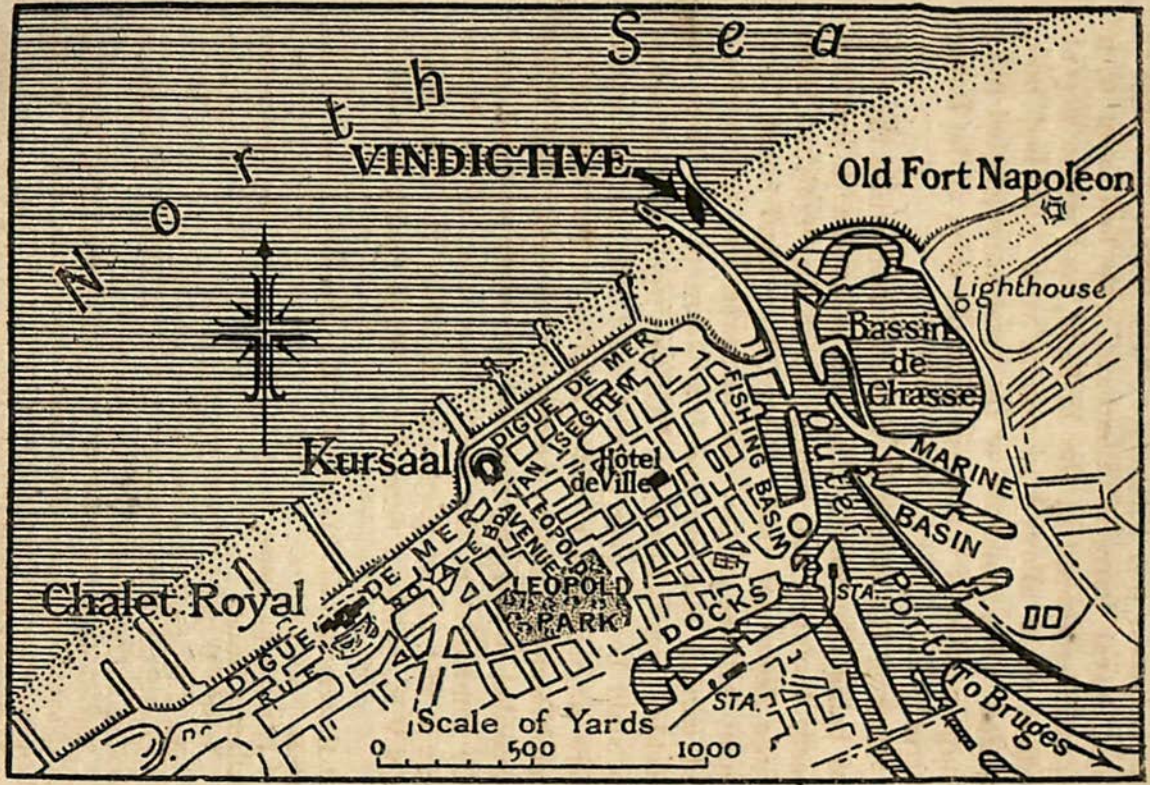
[1] Engineer Lieutenant-Commander William Archibald Bury, R.N.; promoted to Engineer Commander and received the D.S.O. He had distinguished himself in *Vindictive* on April 23.

[2] According to a German account (*infra*, p. 105), whose chronology is reliable, *Vindictive* sank after 2.49 a.m. G.M.T. It is doubtful whether the auxiliary charges took effect. See Lieut. Crutchley's Report, *infra*, p. 183.

[3] Herbert Cavanagh, D.S.M.; received a bar to the D.S.M.

[4] Norman Carroll, D.S.M.; received a bar to the D.S.M

[5] Alan Thomas, D.S.M., prisoner of war.



Raid on Ostend, May 10.

H.M.S. *Lion*, missing; H. Harris,[1] H.M.S. *Royal Sovereign*. The coxswain was First-class Petty Officer J. J. Reed,[2] Royal Naval Barracks, Chatham, who had been with Commander Godsal in the *Brilliant*, and whose urgent request to be allowed to remain with him had been granted. The remainder of the crew were selected from a large number of volunteers from the ships of the Dover Patrol.[3]

'Most of the casualties were incurred while the ship was being abandoned. The men behaved with just that cheery discipline and courage which distinguished them in the Zeebrugge raid. Petty Officer Reed found Lieutenant Alleyne in the conning-tower, still unconscious, and carried him aft under a storm of fire from the machine-guns. Lieutenant Alleyne was badly hit before he could be got over the side, and fell into the water. Here he managed to catch hold of a boat-fall, and a motor-launch,[4] under Lieutenant Bourke, R.N.V.R.,[5] succeeded in rescuing him and two other wounded men. The remainder of the crew[6] were taken off by Motor-launch 254, under Lieutenant Geoffrey H. Drummond, R.N.V.R.,[7] under a fierce fire. When finally he reached

[1] Herbert Alfred Harris, D.S.M.; received a bar to the D.S.M.

[2] P.O. Joseph James Reed, D.S.M.; received the Conspicuous Gallantry Medal.

[3] See the Dispatch of June 15, para. 3.

[4] No. 276. See Commodore Lynes, para. 28.

[5] Lieutenant Roland Bourke, D.S.O., R.N.V.R.; promoted to Lieutenant-Commander and received the V.C.

[6] Motor-launch 254 took off Lieutenant Crutchley, Engineer Lieutenant-Commander Bury, and thirty-seven men. In all, therefore, forty-two survivors escaped from the ship.

[7] Lieutenant Geoffrey Heneage Drummond, R.N.V.R.; promoted to Lieutenant-Commander and received the V.C. See Commodore Lynes, para. 27.

the *Warwick*,[1] the launch was practically in a sinking condition; her bows were shot to pieces. Lieutenant Drummond was himself severely wounded; his second in command, Lieutenant Gordon Ross, R.N.V.R.,[2] and one hand, were killed[3]; a number of others were wounded. The launch was found to be too damaged to tow, and day was breaking; she and the *Warwick* were in easy range of the forts; so, as soon as her crew and the *Vindictive's* survivors were transferred, a demolition charge was placed in her engine-room, and she was sunk.

'Always according to programme, the recall rockets for the small craft were fired from the flagship at 2.30 a.m. The great red rockets whizzed up to lose themselves in the fog; they cannot have been visible half a mile away. But the work was done, and one by one the launches[4] and motor-boats commenced to appear from the fog, stopped their engines alongside the destroyers, and exchanged news with them. There were wounded men to be transferred, and dead men to be reported—their names called briefly across the water

[1] Motor-launch 254 sighted her at 3.15 a.m. G.M.T. See the Dispatch of June 15, para. 10, 13.

[2] Lieutenant Gordon F. Ross, R.N.V.R.; 'mentioned' in the Dispatch of July 24.

[3] Lieutenant Crutchley then took command. See his Report.

[4] Four motor-launches volunteered for rescue work inside the Harbour entrance: Nos. 128 (Lieutenant-Commander Raphael Saunders, R.N.V.R.), 254 (Lieutenant G. H. Drummond, R.N.V.R.), 276 (Lieutenant Roland Bourke, R.N.V.R.), and 283 (Lieutenant-Commander Keith Robin Hoare, R.N.V.R.). The first of these commanders received the D.S.O., the second and third the V.C., and the fourth a bar to the D.S.O. Sub-Lieutenant James Petrie, R.N.V.R., who volunteered for rescue work in M. L. 276, received the D.S.C. Lieutenant Felix Francis Brayfield, R.N.V.R., who volunteered for rescue work in M. L. 128, received the D.S.C. also.

from the little swaying deck to the crowded rail above. But no one had seen a single enemy craft[1]; the nine German destroyers who were out and free to fight had chosen the discreeter part.

'Vice-Admiral Sir Roger Keyes was present at the operation in the destroyer *Warwick*.[2] Commander Hamilton Benn, R.N.V.R., D.S.O., M.P.,[3] was in command of the motor-launches, and Lieutenant Francis C. Harrison, D.S.O., R.N., of the coastal motor-boats. The central smoke-screen was entrusted to Sub-Lieutenant Humphrey V. Low, R.N., and Sub-Lieutenant Leslie R. Blake, R.N.R. Casualties, as at present reported, stand at two officers and six men killed; two officers and ten men, all of *Vindictive*, missing, believed killed; and four officers and eight men wounded.[4]

'It is not claimed by the officers who carried out the operation that Ostend Harbour is completely blocked; but its purpose—to embarrass the enemy and make the harbour impracticable to any but small craft, and dredging operations difficult—has been fully accomplished.'

[1] This is not accurate. Lieutenant Arthur E. P. Welman, D.S.O., D.S.C., R.N., encountered an enemy torpedo-boat near the entrance to Ostend. He engaged her successfully and received a bar to the D.S.O. Lieutenant William H. Bremner, R.N., received the D.S.C. for the same action. The authority already quoted (*The Times*, May 13, 1918) states that no Germans were seen on the pier. This may be so. But a very heavy fire was directed from the piers upon the C.M.B.s that torpedoed them. See Sir Roger Keyes's Dispatch of July 24, pp. 206, 207.

[2] *Warwick* was mined at 4 a.m. See the Dispatch of June 15, para. 12–15, for events subsequent to those detailed in the text.

[3] Commander Ion Hamilton Benn, D.S.O., M.P., R.N.V.R.; received the C.B. and promotion to Temporary Acting Captain.

[4] The casualties were: Officers, 2 killed, 5 wounded, 2 missing; Men, 6 killed, 9 missing, 25 wounded. Total = 49.

(*b*) *The German Admiralty's Account.*[1]

As on the occasion of the former Raid, the German Admiralty announced that of May 10 with characteristic effrontery.

'*Berlin, May* 10, 1918.

'At three o'clock in the morning of May 10 British naval forces, after a violent bombardment, again made a blockading attack on Ostend. Several enemy ships which, under the protection of artificial fog, tried to force their way into the harbour were driven off by the excellently directed fire of our coastal batteries. An old cruiser, entirely battered to pieces, lies aground before the harbour outside the navigation channel. The entrance into the harbour is quite free. Only dead were found on board the stranded vessel. Two survivors had sprung overboard and were captured. According to information so far received, at least two enemy motor-boats were shot away and one monitor badly damaged.[2] The blockading attempt has, therefore, been completely foiled. Once again the enemy sacrificed human lives and vessels in vain.'

A fuller account was transmitted through the wireless stations of the German Government two days later[3]:

'*Berlin, May* 12, 1918.

'The second attempt of the English to get at the Flanders U-boat bases, which are getting more and more

[1] *The Times*, May 11, 1918.

[2] Motor-launch 254 was the only British loss.

[3] *The Times*, May 13, 1918.

troublesome to them every day, found the German Marine Corps equally prepared as [on] the first attempt. It could be foreseen that the English Admiralty would not be satisfied with one attempt. The reason why this time only an attack against Ostend took place cannot at the present moment be judged. It is true that simultaneously with the attack against Ostend a strong artificial mist was developed by the English before Zeebrugge, but apparently this was done only in order to effect a diversion.

'In the morning of May 10 at 2.45[1] the enemy opened fire from the sea and from the land against the German batteries at Ostend. A few minutes later a strong artificial mist was produced. When at two minutes after three[2] two[3] cruisers were sighted in the mist to the east of Ostend, the German heavy batteries immediately opened a well-directed target fire, an obstructive fire having been directed previously against the area before the entrance.

'One of the cruisers turned aside towards the west, the other towards the north. The latter then could be seen repeatedly in the mist and was again bombarded every time. At 3.43 a.m.[4] she loomed up again before the entrance, and, taken under the heaviest fire on all sides, sank outside the channel. In the meantime the German batteries bombarded separate objects which could be observed at sea. A monitor, which was lying still and did not fire, and which clearly had been put out of action,

[1] 1.51 a.m. G.M.T. See note 4, p. 94, *supra*.

[2] 2.8 a.m. G.M.T.

[3] The Germans undoubtedly saw *Vindictive* twice as she sought the entrance from east to west.

[4] 2.49 a.m. G.M.T.

was spotted at 4.13 a.m.,[1] but was immediately afterwards completely enveloped in a mist by the enemy. According to papers which have been found, the stranded cruiser is the *Vindictive*.

'The German losses, as on the occasion of the first operation, are again delightfully small.'

[1] 3.19 a.m. G.M.T. The 'monitor' must have been *Warwick* in her seriously damaged condition with *Velox* lashed alongside. The position is made clear in Sir Roger Keyes's Dispatch of June 15, para. 15.

(c) *The Result.*

A message to Sir Roger Keyes from the War Cabinet on May 11 applauded 'the successful efforts you have made to deal with the submarine menace at the source. The blocking of Ostend last night puts the finishing touch to the gallant achievement at Zeebrugge.' In fact the leader of the operations on May 10 did not regard them as final. Lieutenant Crutchley's Report to Sir Roger Keyes stated that a 'considerable channel' was still open between *Vindictive's* stern and the western pier.[1] A postscript to the Press Bureau's Narrative therefore disclaimed the inference that Ostend Harbour was completely blocked, and a third attack was instantly planned. *Sappho's* defects were repaired at Chatham, and, with feverish haste, the old (1904) battleship *Swiftsure* was prepared as a second blockship. The operation was fixed for the first week in June.

Meanwhile, on May 25, *The Times* announced 'on excellent authority' that the Germans had been successful in shifting *Vindictive's* position inside Ostend Harbour[2]; that she had been swung round so that she lay through her whole length close against the eastern pier, leaving a passage of about thirty feet comparatively free for vessels to go in or out; that this left sufficient space for a destroyer of large size, though it would be difficult to get her through. The statements are substantially correct. But Bruges, not Ostend, was aimed at. To prevent the enemy—Zeebrugge being closed—from clearing his Bruges shipping by the Ostend outlet was Sir Roger Keyes's single purpose. And aerial observation established that it had been effec-

[1] Dispatch of June 15, para. 11.

[2] A picture of the ship as she lay when the Germans evacuated Ostend on October 17 appeared in the *Daily Mail* of October 26, 1918.

tually achieved by the operations on April 23 and May 10. The enemy had not contemplated the need to maintain the Ostend channels and to substitute them for the main one via Zeebrugge. The alternative route was wholly inadequate and the silting up of the channel made it still less practicable. At Zeebrugge also attempts to dredge a passage between *Iphigenia* and *Intrepid* were meeting with no success.[1] The projected third attack therefore was countermanded, actually at the moment the block-ships were leaving the basin.

Hence, the operations on May 10 effectually completed those of St. George's Day, and mitigated a menace to the sea communications of our Army and to the sea-borne trade and food supplies of the United Kingdom which had been continual and increasing for nearly four years.[2] The blocking of Ostend and Zeebrugge, and the success of the anti-submarine barrage in the Straits of Dover, which had been carried out vigorously during the past ten months, amply supported Mr. Lloyd George's declaration to an Edinburgh audience on May 24: 'The submarine is still a menace—it is no longer a peril—as a means of inflicting injury, as a means of absorbing energies which might be better devoted to other purposes, as a means of restricting our power of transport. But as a danger which

[1] A visitor to Zeebrugge immediately after its evacuation by the Germans on October 19, 1918, writes to *The Times* of October 30: 'The block-ships, *Intrepid* and *Iphigenia*, lie well within the piers, the latter across the passage, the other at a slight angle to the piers. *Thetis* is outside, but well across. The German torpedo-boats could only be manœuvred past them with the greatest difficulty after extensive dredging operations had been carried out. . . . Round *Iphigenia's* conning-tower a bomb-proof shelter of reinforced concrete has been erected as a refuge for the men at work on the dredger during our air-raids.'

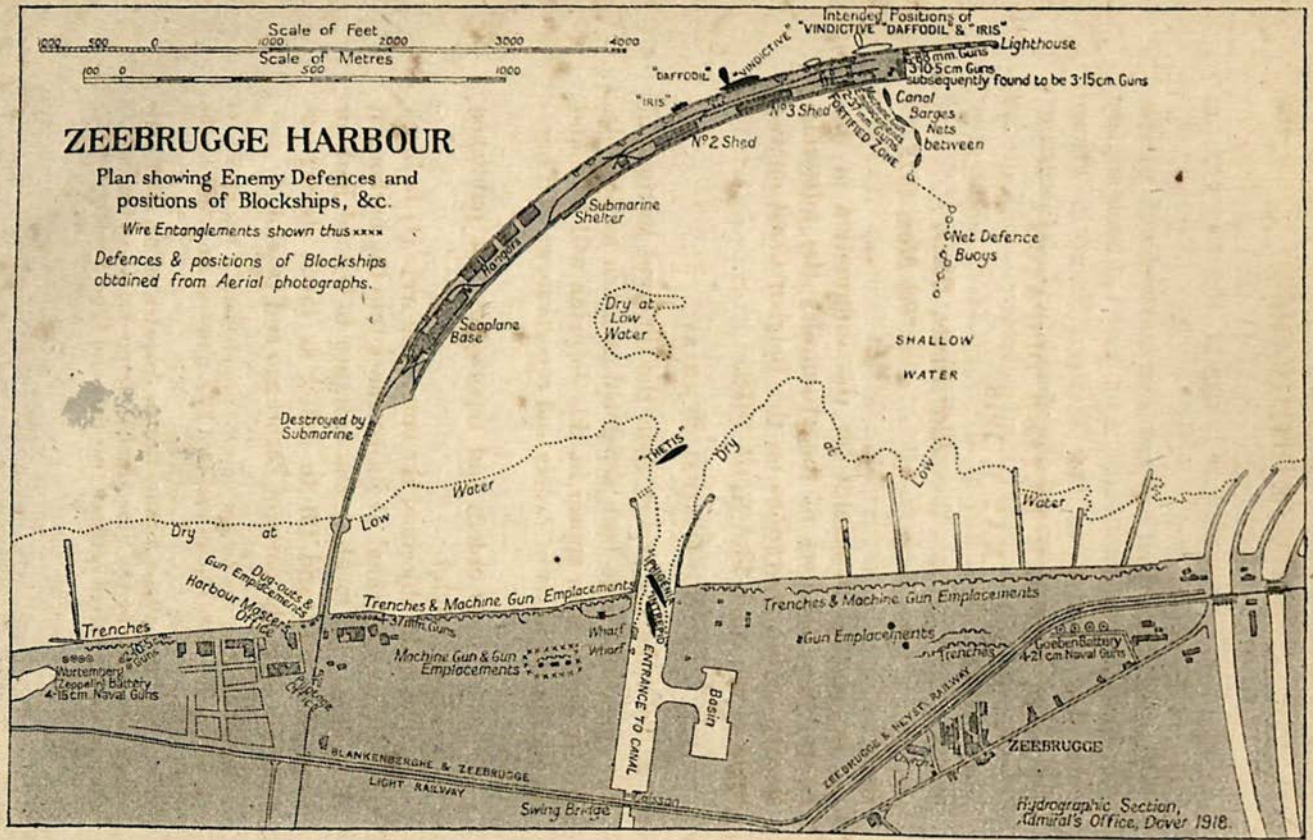
[2] Sir Roger Keyes's Dispatch of May 9, General Summary, para. 5.

could cause the winning or losing of the war you can rule out the submarine.'

Even had the operations not been crowned with success they were of precious value. At a period of tense anxiety over the situation on the Western Front in France and Flanders they braced the moral tone of the nation, which, seeing 'enshrined in the battered hull of the *Vindictive* all that had made our island home great and kept her free in a thousand years of history',[1] drank from the events a deep draught of encouragement. 'These are thrilling deeds', said Mr. Lloyd George, 'that give new heart to a people, not merely for the hour, but, when they come to be read by our children and our children's children, for ages to come. They enrich our history, they enrich the character of our people, they fertilize the manhood of the land.'[2]

[1] Mr. J. L. Garvin, in the *Observer*, Dec. 29, 1918.

[2] *The Times*, May 25, 1918.


Scale of Feet
1000 500 0 1000 2000 3000 4000
Scale of Metres
100 0 500 1000
ZEEBRUGGE HARBOUR
Plan showing Enemy Defences and positions of Blockships, &c.
Wire Entanglements shown thus ××××
Defences & positions of Blockships obtained from Aerial photographs.
Intended Positions of "VINDICTIVE" "DAFFODIL" & "IRIS"
Lighthouse
"DAFFODIL"
"VINDICTIVE"
"IRIS"
8·8 mm Guns
3·10·5 cm Guns subsequently found to be 3·15 cm Guns
No 3 Shed
Canal Barges Nets between
FORTIFIED ZONE
No 2 Shed
Submarine Shelter
Net Defence Buoys
Hangars
Seaplane Base
Dry at Low Water
SHALLOW WATER
Destroyed by Submarine
"THETIS"
Dry at Low Water
Dug-outs & Gun Emplacements
Harbour Master's Office
Trenches & Machine Gun Emplacements
Trenches
Wurttemberg (Zeppelin) Battery 4·15 cm Naval Guns
Machine Gun & Gun Emplacements
Wharf
Wharf
ENTRANCE TO CANAL
Basin
Trenches & Machine Gun Emplacements
Gun Emplacements
Trenches
Goeben Battery 4·21 cm Naval Guns
ZEEBRUGGE & HEYST RAILWAY
ZEEBRUGGE
BLANKENBERGHE & ZEEBRUGGE LIGHT RAILWAY
Swing Bridge
Hydrographic Section, Admiral's Office, Dover 1918.

IV

SIR ROGER KEYES'S DISPATCH, MAY 9, 1918[1]

Fleet House, Dover,
**9th May, 1918.*

SIR,

Be pleased to submit for the information of the Lords Commissioners of the Admiralty the following Report on the Operations on the Belgian Coast on the night of the 22nd-23rd April, 1918.

I.—GENERAL SUMMARY.

2. To make the report clear, the different sections of the operations have been separated as much as possible. Fuller details than appear in this despatch will be found in the complete set of orders and reports forwarded herewith.

(NOTE.—These orders and reports are not published with this despatch.)

3. The main objects of the enterprise were (1) to block the Bruges ship-canal at its entrance into the harbour at Zeebrugge; (2) to block the entrance to Ostend harbour from the sea; and (3) to inflict as much damage as possible upon the ports of Zeebrugge and Ostend.

[1] Published in the *London Gazette* 'Supplement', No. 31189, of February 19, 1918. Notes preceded by a numeral are added by the Editor.

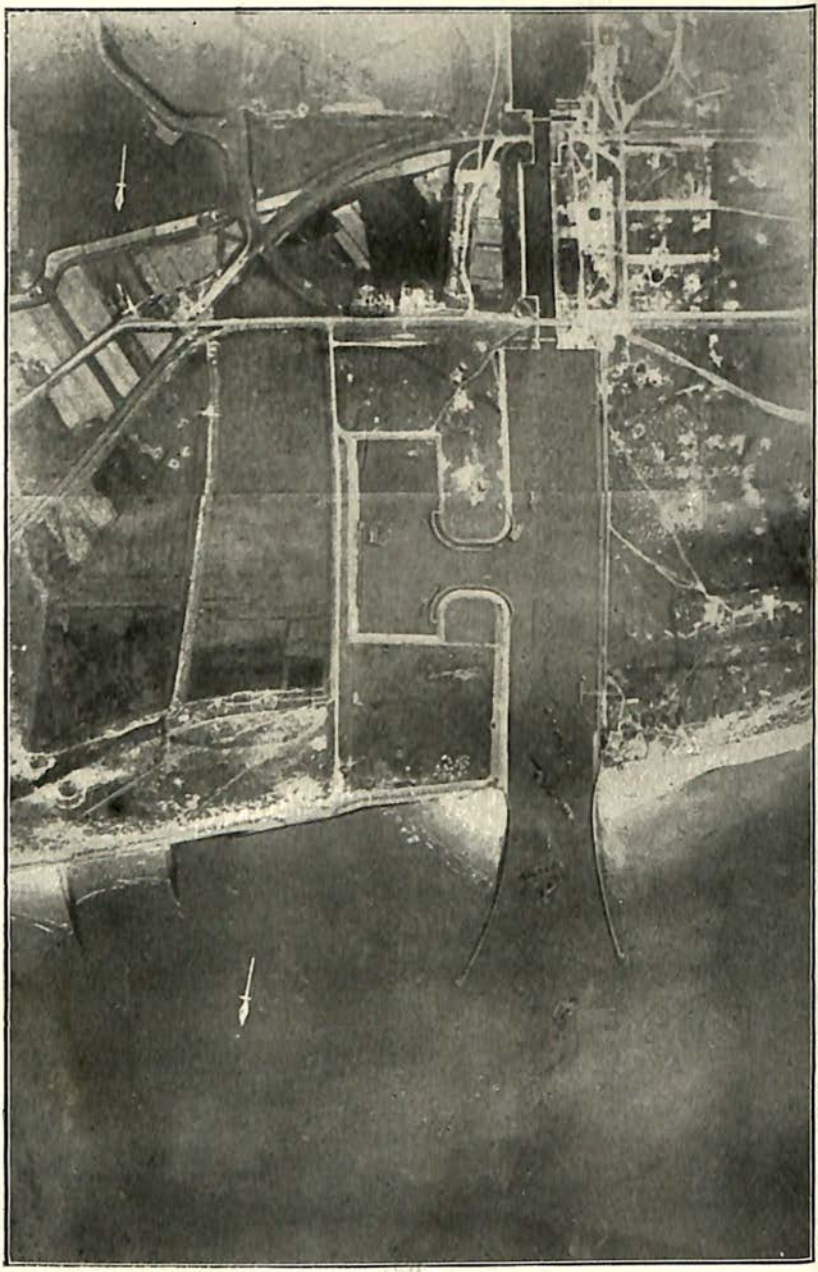
* NOTE.—Some amendments to this despatch of 9th May, 1918, have been made by the Vice-Admiral, Dover Patrol, in the light of information received between that date and 22nd January, 1919.

4. Zeebrugge harbour is connected by a ship-canal with the inland docks at Bruges, which communicate again by means of a system of smaller canals with Ostend harbour. The whole forms a triangle with two sea entrances. The eastern side, which is 8 miles long, is the ship-canal from Zeebrugge to Bruges; the southern side, which is 11 miles long, consists of smaller canals from Bruges to Ostend; the base, facing north-west, is the 12 miles of heavily fortified coast line between Ostend and Zeebrugge. This fortified line is prolonged 8½ miles to the westward, extending to the right flank of the German Army, facing Nieuport, and 7 miles to the eastward as far as the Dutch frontier. The defences include a number of batteries mounting over 225 guns, 136 of which are from 6-in. to 15-in. calibre, the latter ranging up to 42,000 yards.

5. This formidable system has been installed since the German occupation in 1914, and Bruges has recently provided a base for at least 35 enemy torpedo craft and about 30 submarines. By reason of its position and comparative security it has constituted a continual and ever-increasing menace to the sea communications of our Army and the seaborne trade and food supplies of the United Kingdom.

6. When the operations of the 22nd–23rd April were undertaken it was believed that, although the blocking of the Zeebrugge entrance to the Bruges ship-canal was the most important of all objects, it would be necessary also to block the entrance to the Ostend harbour in order to seal up the Bruges ship-canal and docks; for unless this were done the lighter craft would still be able to pass to and fro more or less freely through the smaller canals.

7. The attack upon the Zeebrugge Mole, as well as



SEA-PLANE VIEW OF THE ZEEBRUGGE LOCK-GATES,
SHOWING POSITIONS OF SUNKEN CRUISERS

the bombardment of Zeebrugge by monitors and from the air, were designed to distract the attention of the enemy from the main operations. Without this diversion the attempt of the blocking ships to pass round the end of the Mole, to enter the harbour, and to reach the ship-canal entrance at the inner end must almost certainly have been discovered, with the result that the vessels would have been sunk by the shore batteries long before they reached their goal.

8. An important, though subordinate, object of the attack upon the Zeebrugge Mole was to inflict as much damage as was possible in the time upon the harbour works and defences. In order to prevent enemy reinforcements being brought from shore while this work was in progress arrangements were made for blowing up the viaduct which connected the Mole with the land.

9. Similarly the bombardment of the Ostend defences by our shore batteries in Flanders, by the monitors and also from the air, was designed to cover the attempt to block the entrance to that harbour.

10. It was anticipated that, in addition to the fire from the land batteries and harbour works, the attacking forces would have to face a counter-attack from the powerful destroyer flotilla which was known to be inside. One destroyer emerged from Zeebrugge harbour, and is reported to have been struck by a torpedo fired from C.M.B. No. 5. Other torpedo craft, which apparently had not steam up, remained alongside the Mole, and their crews assisted in its defence. The greater part of the flotilla had for some reason been previously withdrawn to the Bruges docks.

11. As will be seen from the subsequent narrative, our operations were completely successful in attaining

their first and most important object. The entrance to the Bruges ship-canal was blocked. The second object—the blocking of the entrance to Ostend harbour—was not achieved, for reasons which will be explained subsequently. The attack on the Zeebrugge Mole was completely successful as a diversion to enable the blocking ships to enter the harbour, to proceed to their allotted stations, and, with the exception of the *Thetis*, to be sunk in accordance with the plan. The blowing up of the viaduct was carried out without any hitch, and produced the desired results. Owing, however, to various reasons which will be more particularly dealt with later, the less important objective, the destruction of the defences on the Mole, was not so thorough as had been hoped.

12. The main results achieved have, however, proved greater than I expected when the fleet returned to port on the morning of the 23rd April. Aerial observation and photographs show clearly that even the lighter craft in the Bruges ship-canal and docks have so far been unable to find an exit through the smaller waterways to Ostend harbour. At least 23 torpedo craft have remained sealed up at Bruges ever since the operations on St. George's Day, and so far as can be seen not less than 12 submarines would likewise appear to be still imprisoned. As yet no effective steps seem to have been taken to clear the Zeebrugge entrance to the Bruges ship-canal, where the silt is shown to be collecting; and although doubtless in time the enemy will succeed in opening a way out, it seems likely that this important section of his raiding and commerce-destroying forces must inevitably be seriously hampered for a considerable period. In addition to suffering this substantial injury, the enemy has been obliged to bring down reinforce-

ments from the Bight of Heligoland to Zeebrugge and Ostend.

13. The preparations and training for the attack extended over a long period,[1] during the latter portion of which (*i.e.* from the 22nd March) the Dover Patrol was subjected to an exceptional strain owing to the unprecedented transport of reinforcements to France.

14. Success would have been impossible without the eager and generous co-operation of the Grand Fleet, the neighbouring commands and dockyards, and the Harwich Force.

15. The concentration of the attacking fleet had to take place about 63 miles distant from Zeebrugge and Ostend. As the length of time needed for reaching these objectives after the forces had been assembled was seven hours, it was inevitable that there should be a period of not less than four hours of daylight during which enemy observation by air and submarine might discover our movements. In order to guard against this, which would have meant the certain failure of the expedition, it was necessary for the patrols and air forces to show the utmost degree of vigilance and energy. There is every reason for believing that, as a result of their efforts, the enemy remained up to the last entirely unaware of our intentions.

16. In order not only that the attack might have a reasonable prospect of success, but that it might not end in disaster, various conditions were essential: (*a*) a certain state of the tide; (*b*) calm weather; (*c*) a more or less favourable direction of the wind; and (*d*) absence of fog, with, if possible, a moderate amount of haze. The first of these conditions (the state of the tide) fixed the dates between which it was practicable

[1] Marines from Feb. 25; bluejackets from March 1.

to make the attempt. The others it was not possible to reckon with in advance, owing to the uncertainty of the weather, more especially at that time of year, and also to the fact that all these conditions might be different on the Flanders coast from what they were off the Goodwins, or that they might change for the worse between the starting of the expedition from the point of concentration and its arrival at its destination seven hours later.

17. It was anticipated that minefields, which would endanger the heavier draught vessels, might be encountered in the enemy's waters, but this risk had to be faced, and special arrangements were made to save the crews and storming-parties in the event of vessels being sunk.

18. On two occasions previous to the 22nd April the concentration took place, but, owing to unfavourable weather conditions setting in, had to be dispersed.[1] This fact, although it caused disappointment among the officers and men, and also contained a danger that the enemy might become aware of our designs, had a considerable practical value as a rehearsal of the preliminary stages of the undertaking. On this point I may say here that, although on this occasion the wind changed and served us badly at a moment when we were finally committed to the attack, better conditions had not—since the preparations were completed—occurred before, nor have they recurred up to this date.

19. The main force started from the point of concentra-

[1] On the night of April 11–12 the whole striking force got to thirteen miles from its objectives when the conditions compelled retirement. The preliminary bombardment of Ostend was already in progress, and was continued for the reason stated in the Vice-Admiral's para. 20. See his Dispatch of July 24, *infra*, p. 212, for commendations for service on that occasion.

tion at 4.53 o'clock on the afternoon of Monday, the 22nd April.

20. The bombardment of Zeebrugge by monitors began at 11.20 p.m., simultaneously with that of the Ostend defences by monitors, and by our shore batteries in Flanders. These bombardments had been carried out on several nights prior to the 22nd April to give the enemy no reason to anticipate further action on our part on this particular occasion.

21. The vessels charged with making a smoke screen began operations simultaneously off Zeebrugge and Ostend at 11.40 p.m.

22. According to time-table, the hour at which the *Vindictive* (Captain Alfred F. B. Carpenter [1]) should have been laid alongside the Zeebrugge Mole was midnight. She reached her station one minute after midnight, closely followed by the *Daffodil* (Lieutenant Harold Campbell [2]) and *Iris II* (Commander Valentine Gibbs [3]). A few minutes later the landing of the storming and demolition parties began. By 1.10 a.m. the *Vindictive* had taken off the survivors, who had meanwhile done their work upon the Mole, and by 1.15 a.m. she and her consorts were clear of the Mole.

23. At 12.15 a.m. Submarine C 3 (Lieutenant Richard D. Sandford [1]) had succeeded in ramming herself between the iron piers of the viaduct, and was thereupon abandoned by her crew after they had lit the fuses. Five minutes later the cargo of explosives blew up, completely destroying communication between the Mole and the shore.

24. The *Thetis* (Commander Ralph S. Sneyd, D.S.O.[4]), the first of the blocking ships, passed the end of the

[1] Received the V.C.
[2] Received the D.S.O.
[3] Died of wounds.
[4] Promoted to Captain, R.N.

Mole, according to arrangement, twenty-five[1] minutes after midnight. Making her way to the entrance of the ship-canal, she carried away the obstructing nets, and being then in a sinking condition from gunfire, with both her propellers fouled, was sunk by her crew close to the entrance of the canal. The *Intrepid* (Lieutenant Stuart S. Bonham-Carter[2]), the second of the blocking ships, following a few minutes later, was sunk in the ship-canal itself; and the *Iphigenia* (Lieutenant Edward W. Billyard-Leake), the last of the three blocking ships, following close astern of the *Intrepid*, was sunk with the most complete success across the narrowest part of the ship-canal at 12.45 a.m.

25. It was expected that the blocking ships *Brilliant* (Commander Alfred E. Godsal[2]) and *Sirius* (Lieutenant-Commander Henry N. M. Hardy,[3] D.S.O.) would have found the entrance to Ostend harbour by midnight. For the reason, however, which is explained in the next paragraph, they missed their objective, ran ashore, and had both to be sunk about 12.30 a.m.

26. The success of the Ostend enterprise was affected to some extent by two adverse factors: (1) at 12.15 a.m. the wind (N.N.E.), which so far had been favourable for purposes of the smoke screen, shifted into an unfavourable quarter (S.S.W.), thereby exposing the attacking forces to the fire of the enemy; (2) the buoy which marks the channel to Ostend harbour had been moved very shortly before, unknown to us, to a position some 2,400 yards further east, so that when *Brilliant* and *Sirius* found it and put their helms to starboard they ran ashore.

27. The manner in which the survivors of the crews of the five blocking ships and of Submarine C 3 were rescued

[1] By a slip the *Gazette* has 'fifteen'.
[2] Received the D.S.O. [3] Promoted to Commander, R.N.

and brought away by volunteer crews in motor launches and a picket boat was beyond praise. The various incidents are described in subsequent paragraphs.

28. In the course of the attack on St. George's Day our casualties to officers and men were as follows:—Killed, 176; wounded, 412; missing, 49; of the latter 35 are believed to have been killed. Although these casualties are light compared to those that the Army constantly suffers in similar enterprises, we have to mourn the loss of comrades selected from practically every unit of His Majesty's sea forces. Our losses in ships were as follows: —H.M.S. *North Star* and motor launches Nos. 424 and 110, sunk. No other vessel was rendered unfit for further service.

29. I have already submitted to the Lords Commissioners of the Admiralty the list of naval officers whom I considered deserving of promotion, either immediately or as soon as they have the prescribed service. I propose to forward as soon as possible a supplementary despatch bringing to their Lordships' notice the names of other officers and men who distinguished themselves, for they are naturally numerous. They came from many ships, and were scattered immediately the operations were over, so that it is difficult to obtain the details relating to them.[1]

30. I cannot close this brief summary without reference to those gallant souls who did not live to see the success of their endeavours. It seems almost invidious to mention names when every officer and man who took part was animated by one spirit, ardently welcoming the opportunity of achieving a feat of arms against odds in

[1] Honours for services in the operations on April 23 are published in the Supplement to the *London Gazette*, No. 30807, for July 23, 1918.

order that honour and merit might be added to that which our Service has gained in the past. Amongst those who lost their lives were many who shared with me the secrets of the plan, and of those I cannot refrain from recalling Lieutenant-Colonel Elliot, Captain Halahan, Commander Valentine Gibbs, Majors Cordner and Eagles, Lieutenant-Commanders Harrison and Bradford, Lieutenants Hawkings and Chamberlain, and Wing-Commander Brock, who all worked for many weeks in the training of the personnel and the preparation of material. Their keen enthusiasm and absolute confidence that the enterprise would be carried to a successful issue were invaluable to me. During the anxious days of waiting in crowded ships in a secluded anchorage, and in spite of two disappointments, the patience and faith that our chance would come, which were displayed by all, owed much to the fine example of these officers.

NARRATIVE.

II.—Composition of Forces.

31. In order that all parts of the Naval Service might share in the expedition, representative bodies of men were drawn from the Grand Fleet, the three Home Dépôts, the Royal Marine Artillery and Light Infantry. The ships and torpedo craft were furnished by the Dover Patrol, which was reinforced by vessels from the Harwich Force and the French Navy. The Royal Australian Navy and the Admiralty Experimental Stations at Stratford and Dover were also represented.

The details thus contributed, which finally composed the whole striking force, were as shown in the following table:—

From	Monitors.	Light Cruisers.	Leaders.	T.B.D.s.	M.L.s.	C.M.B.s.	Picket Boats.	Parent Ships, &c.	Blocking Ships.	Submarines.	Minesweepers.	Auxiliary Craft.	Besides those belonging to ships in preceding columns.	
													Officers.	Men.
Grand Fleet (exclusive of Royal Marines)	...	...	...	...	...	...	...	...	...	...	...	...	27	365
Harwich Force—														
Covering Squadron	...	7	2	14										
For Operations	...	...	1	6										
Dover Patrol	8	1	4	17	36	12	...	...	...	...	1			
Portsmouth	...	...	...	...	10	12	...	2	1	2	...	1	9	41
The Nore	...	...	...	...	12	...	1	1	4	...	...	1	7	469
Plymouth	...	...	...	...	...	...	...	...	...	...	...	...	2	8
Royal Australian Navy	...	...	...	...	...	...	...	...	...	...	...	...	1	10
French Navy	...	...	...	8	4									
Dover Experimental Base	...	...	...	...	...	...	...	...	...	...	...	...	4	87
Royal Marine Artillery	...	...	...	...	...	...	...	...	...	...	...	...	2	58
Royal Marine Light Infantry	...	...	...	...	...	...	...	...	...	...	...	...	30	660
Total	8	8	7	45	62	24	1	3	5	2	1	2	82	1,698

III.—Training of Personnel, Preparation of Material.

32. A force thus composed and its weapons obviously needed collective training and special preparation to adapt them to their purpose.

33. With these objects, the Blocking Ships and the Storming Forces were assembled towards the end of February and from the 4th April onwards in the West Swin Anchorage, where training specially adapted to the plan of operations was given, and where the organisation of the expedition was carried on. The material as it was prepared was used to make the training practical, and was itself tested thereby. Moreover, valuable practice was afforded by endeavours to carry out the project on two occasions on which the conditions of wind and weather compelled its postponement, and much was learnt from these temporary failures. The *Hindustan*, at first at Chatham and later at the Swin, was the parent ship and training dépôt, and it is due to Captain A. P. Davidson, D.S.O., who also did good work in fitting out the various ships, that the accommodation of the assembling crews and their maintenance during the weeks of preparation and postponement was so ably organised as to reduce the discomforts inseparable from the situation to a minimum. After the second attempt,[1] when it became apparent that there would be a long delay, the *Dominion* joined the *Hindustan*, and the pressure on the available accommodation was relieved by the transfer of about 350 seamen and marines to her.

34. Two special craft, the Liverpool ferry-steamers *Iris* (renamed *Iris II*) and *Daffodil*, were selected after a long search at many ports by Captain Herbert C. J.

[1] On April 11–12.

Grant (Retired) and a representative of the Director of Dockyards, on account of their power, large carrying capacity (1,500), and shallow draft, with a view in the first place to their pushing the *Vindictive* alongside the Mole (for which they were in the result most useful); to the possibility, should the *Vindictive* be sunk, of their bringing away all her crew and the landing parties; and to their ability to manœuvre in shallow waters or clear of minefields or torpedoes. They proved to be admirably chosen, and rendered good service.

35. The blocking ships and *Vindictive* were specially prepared for their work in Chatham Dockyard, the *Iris II* and *Daffodil* at Portsmouth. I received the most zealous and able help from all officers and Departments concerned, who did their utmost to expedite the work in every way.

36. I was able to devote more personal attention and time to working out the plan of operations and the preparation of personnel and material than would otherwise have been possible, because Rear-Admiral Cecil F. Dampier, Admiral Superintendent and second in command of the Dover Flotilla, Commodore the Hon. Algernon Boyle, C.B., M.V.O.,[1] Chief of Staff, and Captain Wilfred Tomkinson,[2] commanding the Sixth (Dover) Flotilla of Destroyers, practically relieved me of all the routine work of the Dover base and patrol. I am greatly indebted to Admiral Dampier for his loyal co-operation in connection with the operations. In order to bring together the number of destroyers requisite for the operation, while maintaining the work of the patrol, it was necessary to have the entire available force in running order. This called for high organisation on Captain Tomkinson's part, and was made especially difficult

[1] Received the C.M.G. [2] Received the C.B.

because the period of preparation coincided with that in which very heavy demands were suddenly made on the escort flotilla by the pressing needs of the army in France. The fact that the many additional services which the Dover Patrol was called on to carry out, in addition to its routine, were performed without deranging its working, reflects the greatest credit on Commodore Boyle, whose exceptional powers of organisation have been invaluable to me.

37. Reference to Wing-Commander F. A. Brock's[1] services during the operation will be made in connection with the attack on the Mole, but I cannot leave this part of the subject without recording my indebtedness to him for the indispensable share he had in the operation. When, as Vice-Admiral of the Dover Patrol, I first began to prepare for this operation, it became apparent that without an effective system of smoke-screening such an attack could hardly hope to succeed. The system of making smoke previously employed in the Dover Patrol was unsuitable for a night operation, as its production generated a fierce flame, and no other means of making an effective smoke screen was available. Wing-Commander Brock and sixty ratings were lent to my command, a factory was established in the dockyard, and he worked with great energy to obtain materials, designing and organising the means and the plans, and eventually developing the resources with which we finally set out. These were of great value even in the adverse circumstances which befell us, and I greatly deplore the loss of a man so well qualified to carry experiments in this matter further. When on the Mole he was very keen to acquire knowledge of the range-finding apparatus which might be of use to the country, and his efforts to do this

[1] Killed.

were made without any regard to his personal safety, and I fear cost this very brave and ingenious officer his life.[1]

38. The fitting out of the motor launches and coastal motor boats with smoke apparatus, designed by Wing-Commander Brock, was carried out at Dover, under short notice and with untiring energy by my Flag Captain Ralph Collins,[2] ably assisted by Commander Hamilton Benn,[3] Engineer Lieutenant-Commander M. G. A. Edwards, Lieutenant F. C. Archer, and Mr. G. D. Smart of H.M. Dockyard, Dover.

39. Staff-Paymaster Walter C. Northcott, R.N.R., the Naval Supply Officer at Dover, was at all times most zealous and untiring in dealing with the vast quantities of stores and munitions which had to be checked and distributed, often at very short notice.

40. The first officer who became available for a command in the blockships was Lieutenant Ivan B. Franks (*Dolphin*). Although suffering from the severe effects of an accident on service, his confident enthusiasm fired all who came into touch with him. He was put in charge of the early preparations of all the blockships and commanded the *Iphigenia* in the two abandoned attempts, but to his great disappointment he was taken ill with appendicitis two days before the actual attack, and had to be sent to hospital to undergo an operation. I do not wish the good work he did, and the good example he set, to go unrecorded.

41. The flag officers of other commands who were in a position to assist me did so most generously. The Commander-in-Chief of the Grand Fleet sent me a selected body of officers and men truly representative of his command, for I understand that the whole of his command

[1] See *infra*, para. 72.

[2] Received the C.B.

[3] Promoted to Temporary Acting Captain, R.N.V.R.

would have been equally glad to come. From the neighbouring commands at Portsmouth and the Nore, the Adjutant-General, Royal Marines, and the Dépôt at Chatham, I received support and assistance, not only in ships and men, but in every possible way. The Rear-Admiral Commanding the Harwich Force spared me a flotilla leader and six destroyers, besides protecting the northern flank of the area in which I was operating.

Brigadier-General McEwan and his staff at Chatham supervised the training of the officers and men from the Grand Fleet as if for the Royal Naval Division, France. Their assistance was invaluable, and I much appreciate their whole-hearted co-operation.

42. I am much indebted to Brigadier-General Charles L. Lambe, C.M.G., D.S.O., commanding the 7th Brigade of the Royal Air Force, and Lieutenant-Colonel Frederick C. Halahan, M.V.O., D.S.O., in command of the Air Forces under my command, for the co-operation of the 61st and 65th Wings, under Lieutenant-Colonels P. F. M. Fellowes, D.S.O., and James T. Cull, D.S.O., respectively, throughout the preparation and execution of the operations. The 65th Wing was lent for the purpose by the Field-Marshal Commander-in-Chief, British Armies in France. For several weeks the 61st Wing was engaged in frequent reconnaissances, and took a large number of photographs in different conditions of tide, from which photographs, plans and models were constructed. On the first occasion of attempting the operation, the 65th Wing was already committed to their attack when I was compelled by shift of wind to withdraw the sea attack. The air attack was delivered with the greatest gallantry at a low altitude, and against a tremendous anti-aircraft defence. To the intense disappointment of the 65th Wing, mist and rain made it impossible to

co-operate by repeating the aerial bombardment on the night of the 22nd-23rd April, but the 61st Wing and aircraft from the Guston aerodrome at Dover escorted the main force across the North Sea. · · · ·

IV.—Preparation and Defence of Route.

43. The preparation of the routes from the starting points of attack by the removal of obstructions, and the placing of navigational marks and those for the long-range bombardments, was carried out by Captain Henry P. Douglas,[1] borne for surveying duties on my staff, and Lieutenant-Commander Francis E. B. Haselfoot, his assistant. The completely successful manner in which this very important work was done, in circumstances of interference from the enemy and the elements, does great credit to these officers, both of whom I recommend to the favourable notice of the Lords Commissioners.

44. To afford protection at a certain point in the route, and to maintain the aids to navigation during the approach and retirement of the expedition, a force consisting of the flotilla-leader *Scott* and the destroyers *Ulleswater*, *Teazer*, and *Stork*, lent from the Harwich Force, and the light cruiser *Attentive*, flying the broad pendant of Commodore the Hon. Algernon D. E. H. Boyle,[1] my Chief of Staff, was stationed there. The duties of this force were not interrupted by the enemy, but it was instrumental in controlling and directing the movements of detached craft in both directions, and relieved me of all anxiety on that score.

[1] Received the C.M.G.

V.—The Passage of the Forces.

45. At the moment of starting, the forces were disposed thus:—

(*a*) *In the Swin.*

For the attack on the Zeebrugge Mole: *Vindictive*, *Iris II*, and *Daffodil.*

To block the Bruges Canal: *Thetis*, *Intrepid*, and *Iphigenia.*

To block the entrance to Ostend: *Sirius* and *Brilliant.*

(*b*) *At Dover.*

T.B.D. *Warwick* (flag of Vice-Admiral).

Unit L, *Phœbe* and *North Star.*

Unit M, *Trident* and *Mansfield.*

Unit F, *Whirlwind* and *Myngs.*

Unit R, *Velox*, *Morris*, *Moorsom*, and *Melpomene.*

Unit X, *Tempest* and *Tetrarch.*

To damage Zeebrugge viaduct: Submarines C 1 and C 3.

A special picket boat to rescue crews of C 1 and C 3.

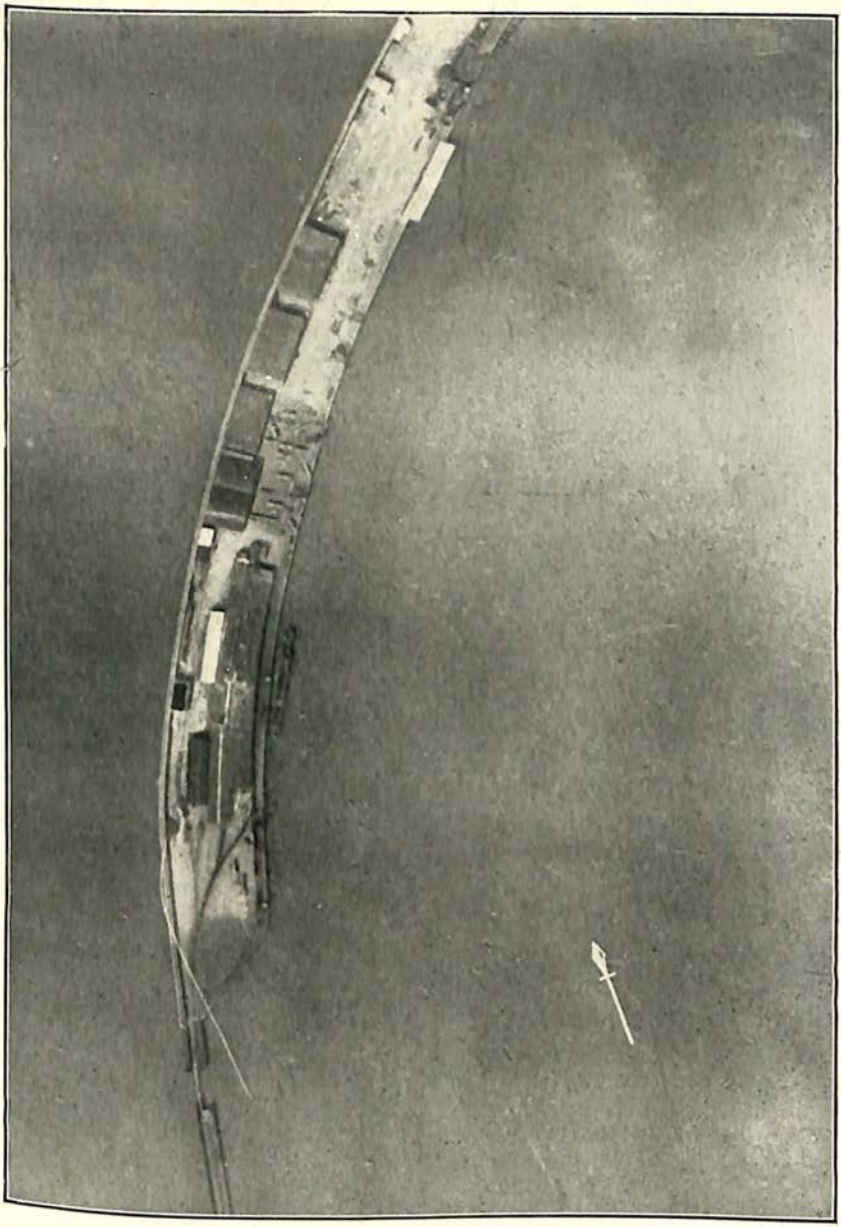
Minesweeper *Lingfield* to take off surplus steaming parties of blockships, which had 100 miles to steam.

Eighteen coastal motor boats, numbers 5, 7, 15, 16, 17, 21B, 22B, 23B, 24A, 25BD, 26B, 27A, 28A, 29A, 30B, 32A, 34A, 35A.

Thirty-three motor launches, numbers 79, 110, 121, 128, 223, 239, 241, 257, 258, 262, 272, 280, 282, 308, 314, 345, 397, 416, 420, 422, 424, 513, 525, 526, 533, 549, 552, 555, 557, 558, 560, 561, 562.

To bombard vicinity of Zeebrugge: Monitors *Erebus* and *Terror.*

To attend on monitors, &c.: *Termagant*, *Truculent*, and *Manly.*



SEA-PLANE VIEW OF THE MOLE, SHOWING THE VIADUCT REPAIRED

Outer Patrol off Zeebrugge: *Attentive, Scott, Ullswater, Teazer,* and *Stork.*

(c) *At Dunkirk.*

Monitors for bombarding Ostend: *Marshal Soult, Lord Clive, Prince Eugene, General Craufurd,* M. 24 and M. 26.

For operating off Ostend: *Swift, Faulknor, Matchless, Mastiff,* and *Afridi.*

The British destroyers *Mentor, Lightfoot, Zubian,* and French torpedo-boats *Lestin, Capitaine Mehl, Francis Garnier, Roux,* and *Bouclier,* to accompany the monitors.

Eighteen British motor launches, numbers 11, 16, 17, 22, 23, 30, 60, 105, 254, 274, 276, 279, 283, 429, 512, 532, 551, 556, engaged in smoke-screening duty inshore and rescue work, and six for attending on big monitors.

Four French motor launches, numbers 1, 2, 33, and 34, attending on M. 24 and M. 26.

Coastal motor boats (40 feet), numbers 2, 4, 10, and 12; (55 feet) 19 and 20.

46. Navigational aids having been established on the route, the forces from the Swin and Dover were directed to join my flag off the Goodwin Sands and proceed in company to a rendezvous, and thereafter as requisite to their respective stations; those from Dunkirk were given their orders by the Commodore.

47. An operation time-table was issued to govern the movements of all the forces, wireless signals were prohibited, visual signals of every sort were reduced to a minimum, and manœuvring prearranged as far as foresight could provide. With few and slight delays the programme for the passage was carried out as laid down, the special aids to navigation being found of great assistance.

48. The Harwich Force, under Rear-Admiral Sir Reginald Tyrwhitt, K.C.B., D.S.O., was posted to cover the operation and prevent interference from the northward, which relieved me of all concern on that score.

49. On leaving the Goodwins, the Main Force was disposed in three columns. The centre column was led by *Vindictive*, with *Iris II* and *Daffodil* in tow, followed by the five blocking ships and the paddle mine-sweeper *Lingfield*, escorting five motor launches for taking off the surplus steaming parties of the blocking ships. The starboard column was led by the *Warwick*, flying my flag, followed by the *Phœbe* and *North Star*, which three ships were to cover the *Vindictive* from torpedo attack while the storming operations were in progress; *Trident* and *Mansfield*, towing submarines C 3 and C 1; and *Tempest*, to escort the two Ostend blockships. The port column was led by *Whirlwind*, followed by *Myngs* and *Moorsom*, which ships were to patrol to the northward of Zeebrugge; and the *Tetrarch*, also to escort the Ostend blockships. Every craft was towing one or more coastal motor boats, and between the columns were motor launches.

50. The greater part of the passage had to be carried out in broad daylight, with the consequent likelihood of discovery by enemy aircraft or submarine. This risk was largely countered by the escort of all the scouting aircraft under my command. On arrival at a certain position (C), it being then apparent that the conditions were favourable, and that there was every prospect of carrying through the enterprise up to programme time, a short prearranged wireless signal was made to the detached forces that the programme would be adhered to.

51. On arrival at a position 1½ miles short of (G), at which Commodore Boyle's force was stationed, the whole

force stopped for fifteen minutes to enable the surplus steaming parties of the blockships to be disembarked and the coastal motor boats slipped. These and the motor launches then proceeded in execution of previous orders. On resuming the course the *Warwick* and *Whirlwind*, followed by the destroyers, drew ahead on either bow to clear the passage of enemy outpost vessels.

52. When the *Vindictive* arrived at a position where it was necessary for her to alter course for the Mole, the *Warwick*, *Phœbe*, and *North Star* swung to starboard and cruised in the vicinity of the Mole until after the final withdrawal of all the attacking forces. During this movement and throughout the subsequent operations *Warwick* was manœuvred to place smoke screens wherever they seemed to be most required, and when the wind shifted from north-east to south-west, her services in this respect were particularly valuable.

VI.—Bombarding Forces.

53. *Zeebrugge.*—The monitors *Erebus* (Captain Charles S. Wills, C.M.G., D.S.O.) and *Terror* (Captain Charles W. Bruton), with the destroyers *Termagant*, *Truculent*, and *Manly*, were stationed at a position suitable for the long-range bombardment of Zeebrugge in co-operation with the attack. Owing to poor visibility and an extraordinary set of the tide the opening of bombardment was delayed slightly behind programme time; otherwise the operations of this force were carried out according to plan. During the operation enemy shell fell in the vicinity of *Erebus* and *Terror*, but neither was hit. On completion of the bombardment the vessels of this force took up patrolling positions to cover the retirement from Zeebrugge. Aerial photographs show the good effect of this bombardment.

54. *Ostend.*—Similarly, the monitors *Marshal Soult* (Captain George R. B. Blount, D.S.O.), *General Craufurd* (Commander Edward Altham), *Prince Eugene* (Captain Ernest Wigram, D.S.O.), and *Lord Clive* (Commander Reginald J. N. Watson, D.S.O.), and the small monitors M. 21 (Commander Oliver M. F. Stokes), M. 24 (Acting Commander Claude P. C. de Crespigny), and M. 26 (Lieutenant-Commander Arthur C. Fawssett) were stationed by Commodore Hubert Lynes, C.M.G.,[1] in suitable positions to bombard specified batteries. These craft were attended by the British destroyers *Mentor*, *Lightfoot*, and *Zubian*, and the French *Capitaine Mehl*, *Francis Garnier*, *Roux*, and *Bouclier*. The Commodore reports that the bombardment was undoubtedly useful in keeping down the fire of the shore batteries. These returned the monitors' fire about five minutes after the latter opened, the ships being hit by fragments of shell, but no material damage being done.

55. *Siege Guns.*—Co-operation by R.M.A. siege guns (Colonel Pryce Peacock, R.M.A.) on given enemy targets was arranged by the Commodore Dunkirk, to which the enemy replied without causing any casualties or any damage of importance.

VII.—Attack on Zeebrugge Mole.

56. *General.*—The attack on the Mole was primarily intended to distract the enemy's attention from the ships engaged in blocking the Bruges Canal. Its immediate objectives were, firstly, the capture of the 4·1 inch battery at the sea end of the Mole*, which was a serious

[1] Received the C.B.

* Note.—After the evacuation of Zeebrugge by the enemy it was found that these guns were of 5·9 inch calibre, and subsequent to these operations the battery was moved from the end of the Mole on to the parapet.

menace to the passage of the blockships, and, secondly, the doing of as much damage to the material on the Mole as time permitted; for it was not the intention to remain on the Mole after the primary object of the expedition had been accomplished.

The attack was to consist of two parts; (*a*) the landing of storming and demolition parties, and (*b*) the destruction of the iron viaduct between the shore and the stone Mole.

57. The units detailed for the attack were:—

(*a*) H.M. Ship *Vindictive*, Acting Captain F. B. Carpenter[1] (late *Emperor of India*); the special steamers *Iris II*, Commander Valentine Gibbs[2] (*Tiger*), and *Daffodil*, Lieutenant Harold G. Campbell[3] (*Emperor of India*); the latter detailed to push the *Vindictive* alongside the Mole and keep her there as long as might be requisite.

(*b*) Submarines C 8 and C 1, commanded by Lieutenants Richard D. Sandford[1] and Aubrey C. Newbold respectively, attended by a picket boat under Lieutenant-Commander Francis H. Sandford, D.S.O.[4]

58. Besides the above, a flotilla of twenty-four motor launches and eight coastal motor boats were told off for rescue work and to make smoke screens or lay smoke floats, and nine more coastal motor boats to attack the Mole and enemy vessels inside it, &c.

At 11.40 p.m. the coastal motor boats detailed to lay the first smoke screen ran in to a very close range and proceeded to lay smoke floats and by other methods produce the necessary 'fog'. These craft came under heavy fire, and only their small size and great speed saved them from destruction.

[1] Received the V.C.
[2] Killed.
[3] Received the D.S.O.
[4] Promoted to Commander.

59. *Vindictive.*—At 11.30 p.m. the Blankenberghe light buoy was abeam, and the enemy had presumably heard or seen the approaching forces, as many star shells were fired, lighting up the vicinity, but no enemy patrol craft were sighted. At this time the wind, which had been from the north-east, and therefore favourable to the success of the smoke screens, died away, and at a later period came from a southerly direction. Many of the smoke floats laid just off the Mole extension were sunk by enemy fire, and this in conjunction with the changes in the wind lessened the effectiveness of the smoke screen.

60. At 11.56, the ship having just passed through a smoke screen, the Mole extension was seen in the semi-darkness about 300 yards off on the port bow. Speed was increased to full, and course altered so that allowing for cross tide the ship would make good a closing course of 45 degrees to the Mole. The *Vindictive* purposely withheld her fire to avoid being discovered, but almost at the moment of her emerging from the smoke the enemy opened fire. So promptly, under the orders of Commander Edward O. B. S. Osborne,[1] was this replied to by the port 6-inch battery, the upper-deck pom-poms, and the gun in the fore-top, that the firing on both sides appeared to be almost simultaneous. Captain Carpenter was conning the ship from the port forward flame-thrower hut. Lieutenant-Commander Robert R. Rosoman,[2] with directions as to the handling of the ship should the captain be disabled, was in the conning tower from which the ship was being steered.

61. At one minute after midnight on the 23rd April, St. George's Day—the programme time being midnight—the *Vindictive* was put alongside the Mole, taking gently on the special fenders of the port bow, and the starboard

[1] Received the D.S.O. [2] Promoted to Commander.

anchor was let go. At this time the noise was terrific. During the previous few minutes the ship had been hit by a large number of shell and many casualties caused. Lieutenant-Colonel Bertram N. Elliot, D.S.O., and Major Alexander A. Cordner, the two senior officers of the Royal Marine storming parties, and Captain Henry C. Halahan, D.S.O., commanding the naval storming parties, all ready to lead the men on to the Mole, had been killed; Commander Patrick H. Edwards, R.N.V.R., and many other officers and men killed or wounded.

62. As there was some doubt as to the starboard anchor having gone clear, the port anchor was dropped close to the foot of the Mole, and the cable bowsed-to with less than a shackle out. A three-knot tide was running past the Mole; and the scend alongside the Mole created by the slight swell caused much movement on the ship. There was an interval of three or four minutes before *Daffodil* could arrive and commence to push *Vindictive* bodily alongside. During this interval the ship could not be got close enough for the special mole-anchors to hook, and it was a very trying period. Many of the brows had been broken by shell fire, and a heavy roll had broken up the foremost mole-anchor as it was being placed. The two foremost brows, however, reached the wall, and the naval storming parties, led in the most gallant manner by Lieutenant-Commander Bryan F. Adams[1] (*Princess Royal*) ran out along them closely followed by the Royal Marines, gallantly led by Captain and Adjutant A. R. Chater.[2] Owing to the rolling of the ship a most disconcerting motion was imparted to the brows, the outer ends of which were 'sawing' considerably on the Mole parapet. Officers and men were carrying Lewis guns, bombs, ammunition, &c.,

[1] Promoted to Commander. [2] Received the D.S.O.

and were under heavy machine-gun fire at close range. Add to this a drop of 30 feet between the ship and the Mole and some idea of the conditions which had to be faced may be realised. Yet the storming of the Mole by these two brows, and later by two others which were got into position, was carried out without the smallest delay, and without any apparent consideration of self-preservation. Some of the first men on the Mole did splendid work with the object of hauling one of the large mole-anchors across the parapet. Lieutenant-Commander Rosoman assisted in this on board, encouraging and directing the men with great coolness and ability.

Daffodil arrived three minutes after *Vindictive*, closely followed by *Iris II.* Both suffered less in the approach, *Vindictive* occupying practically all the enemy's attention. As already stated, *Daffodil's* primary duty was to push *Vindictive* bodily on to the Mole, to enable her to be secured, after which *Daffodil* was to come alongside and land her parties over that ship. In the end her men had to disembark from her bows on to *Vindictive*, as it was found essential to continue to push *Vindictive* on to the Mole throughout the action. This duty was magnificently carried out by her Commanding Officer, Lieutenant Harold G. Campbell [1] (*Emperor of India*), who, during the greater part of the time, was suffering from a wound in the head which for the time deprived him of the sight of one eye. Without the assistance of *Daffodil* very few of the storming parties from *Vindictive* could have been landed or re-embarked; and the greatest credit is due to Mr. Campbell for the skilful manner in which he handled his ship.

63. The landing from *Iris II* was even more trying. The scend alongside made her bump heavily, and

[1] Received the D.S.O.

rendered the use of the scaling ladders very difficult, many being broken up. Lieutenant Claude E. V. Hawkings (*Erin*) ascended the first ladder, secured the mole-anchor, and was then shot and fell on to the Mole. Lieutenant-Commander George N. Bradford (*Orion*) got to the top of a derrick with a mole-anchor on it, leaped on to the Mole, secured the anchor and was shot, falling into the water between *Iris II* and the Mole. Gallant attempts to recover his body were made, Petty Officer M. D. Hallihan being killed while so employed. The gallantry and devotion to duty of these two officers was of the highest order. In the end, so impossible was it to get the mole-anchors to hold, that the cable was slipped, and *Iris II* went alongside *Vindictive* to enable 'D' Company and her Royal Marines to land across her, but only a few men had got to the *Vindictive* when the withdrawal signal was sounded.

64. On board the *Vindictive* the foremost 7·5-inch Howitzer's Marine crew were all killed or wounded in the very early part of the action. A naval crew from a 6-inch gun took their place, and were almost entirely wiped out. At this period the ship was being hit every few seconds, chiefly in the upper works, from which the splinters caused many casualties. It was difficult to locate the guns which were doing the most damage, but Lieutenant Charles N. B. Rigby, R.M.A., with his Royal Marines in the foretop, kept up a continuous fire with pom-poms and Lewis guns, changing rapidly from one target to another. Two heavy shells made direct hits on the foretop, killing Lieutenant Rigby and killing or disabling all in the top, except Sergeant N. A. Finch,[1] who, though severely wounded, continued firing till the top was wrecked by another heavy shell. Captain

[1] Received the V.C.

Carpenter reports that before going into the foretop Lieutenant Rigby had displayed fine courage and ability, and that the success of the storming of the Mole was largely due to the good work of this officer and the men under his orders.

65. Acting Captain Reginald Dallas Brooks, R.M.A.,[1] was in command of the R.M.A. gun detachments in *Vindictive*. He not only set his men generally a splendid example of devotion to duty, but commanded the crew of the 11-inch Howitzer in its exposed position in a very fine manner.

66. Half an hour after the storming of the Mole had been commenced, the Captain visited the decks below and found Staff-Surgeon James McCutcheon[2] and the staff under him working with great energy and care. A constant stream of casualties were being brought down every hatch, yet there appeared to be no delay in dealing with each case.

67. *The Mole.*—The attack on the Mole was designed to be carried out by a storming force to prepare the way for, and afterwards to cover and protect, the operations of a second force which was to carry out the actual demolition, damage, &c. Both these forces comprised Royal Naval ranks and ratings under the command of Captain Henry C. Halahan, D.S.O.,[3] and Royal Marines under the command of Lieutenant-Colonel Bertram N. Elliot, D.S.O.[3]

68. The storming force was composed of Naval Companies—A. (Lieutenant-Commander Bryan F. Adams,[4] *Princess Royal*), B. (Lieutenant Arthur G. B. T. Chamberlain,[3] *Neptune*), and D. (Lieutenant-Commander G. N. Bradford, *Orion*), all under the command of Lieutenant-

[1] Received the D.S.O.
[2] Promoted to Fleet Surgeon.
[3] Killed.
[4] Promoted to Commander.

Commander Arthur L. Harrison[1] (*Lion*), and the 4th Battalion, Royal Marines, organised as follows:—

'A' (Chatham) Company: Major Charles E. C. Eagles, D.S.O.[1]

'B' (Portsmouth) Company: Captain Edward Bamford, D.S.O.[2]

'C' (Plymouth) Company: Major Bernard G. Weller, D.S.C.[3]

Machine Gun Company: Captain Charles B. Conybeare.

On the death of Lieutenant-Colonel Elliot, D.S.O., and Major Alexander A. Cordner (Second in Command), Major Weller assumed command of the battalion. Captain A. R. Chater[4] was battalion adjutant.

This force was embarked mainly in *Vindictive*, but partly in *Iris II.*

69. The demolition force was composed of C. Naval Company, under the command of Lieutenant Cecil C. Dickinson[5] (*Resolution*), and was divided into three parties, Nos. 1 and 3, under Sub-Lieutenant Felix E. Chevallier[6] (*Iron Duke*), being conveyed in the *Daffodil*, and No. 2, under Lieutenant Dickinson, in the *Vindictive*.

70. The objectives of the storming forces had been communicated to the officers, and specific duties allotted to the different units, who had been exercised on a replica of the Mole, described to the men as 'a position in France'.

71. This specialised preparation was necessary, but it handicapped the leaders of the storming parties, for, owing to the difficulty in recognising objects on the Mole, the *Vindictive* overran her station and was berthed

[1] Killed.
[2] Received the V.C.
[3] Received the C.B.
[4] Promoted to Major; D.S.O.
[5] Received the D.S.O.
[6] Promoted to Lieutenant.

some 400 yards further to the westward (or shore end of the Mole) than was intended (see plan[1]). It was realised beforehand that *Vindictive* might not exactly hit off her position, but the fact that the landing was carried out in an unexpected place, combined with the heavy losses already sustained by *Vindictive*, seriously disorganised the attacking force. The intention was to land the storming parties right on top of the 4·1 inch guns (see footnote to para. 56) in position on the seaward end of the Mole, the silencing of which was of the first importance, as they menaced the approach of the blockships. The leading blockship was timed to pass the lighthouse twenty-five minutes after *Vindictive* came alongside. This period of time proved insufficient to organise and carry through an attack against the enemy on the seaward end of the Mole, who were able to bring heavy machine-gun fire to bear on the attacking forces. As a result the blockships came under an unexpected fire from the light guns on the Mole extension,* though the 4·1 inch battery on the Mole head remained silent (see paragraphs 73 and 94).

72. Lieutenant-Commander Adams, followed by the survivors of 'A' and 'B' Companies, were the first to land, no enemy being then seen on the Mole. These two companies had suffered severely before landing, especially 'B', both of whose officers were casualties. They found themselves on a pathway on the Mole parapet about 8 feet wide, with a wall 4 feet high on the seaward side, and an iron railing on the Mole side. From this pathway there was a drop of 15 feet on to the Mole proper. This raised portion of the Mole will in

[1] At p. 110.

* NOTE.—After the evacuation it was found that three of the guns on the Mole extension were of 4·1 calibre.

future be referred to as the parapet. Followed by his men, Mr. Adams went along the parapet to the left (towards the lighthouse extension), where he found a look-out station or control, with a range-finder behind and above it. A bomb was put into this station, which was found clear of men. Wing Commander Frank A. Brock here joined the party, and went inside to investigate. He was not seen again by Mr. Adams, but from other accounts it is believed he was seen alive later.[1]

73. Near this look-out station an iron ladder led down to the Mole, and three of Mr. Adams' party descended it and prevented a few of the enemy from reaching the harbour side of the Mole. Two destroyers alongside the Mole showed no activity up to this time, nor did Mr. Adams see the three-gun battery at the Mole end

[1] A warrant-officer (*The Times*, April 26) declares that Wing-Commander Brock was 'knocked out' while 'going single-handed for a gun's crew' on the Mole. 'I can imagine him', says a friend (*The Times*, April 25) 'being on the Mole at Zeebrugge, and, if he lost his revolver, fighting on with his fists.' A member of the Naval storming party gives the following account of his end (*Morning Post*, April 27, 1918): 'We were one of the earliest crowds to go over, and Commander Brock went ahead. It was a fearful job getting over the brow, but the Commander dropped down on to the Mole, a distance of fifteen feet. "Come on, you boys," he shouted, and one by one we followed him. There were Huns near us in a nest surrounded by barbed wire, but we stormed that and reached one of the guns on the Mole. Commander Brock, single-handed, attacked the gun's crew, and we captured the gun and put it out of action. Then we went further along the Mole, and in the light of the star-shells I saw the officer fighting the crew of another gun. The last time I saw him he was removing one of the locks of the gun. He shouted to us to go on, and said that he was coming too, but I never saw him again. A Marine told me that just before we went back to the ship he saw Commander Brock wounded and being held up against the side of the Mole by two Marines, who refused to leave him.'

fire at any time whilst he was on the parapet, but a machine gun about 100 yards to the westward of these guns was firing on his party. It appeared at this time that the enemy were firing at the *Vindictive* from the shore end of the Mole, but no gun flashes were seen, as everything was so well illuminated by enemy star shell and the rockets fired by *Vindictive*. After capturing the look-out station Mr. Adams advanced to the eastward about 40 yards, where he left his party in position and himself returned to collect more men.

74. Returning to the look-out station, Mr. Adams found only some wounded, but later collected two Lewis gunners and a small party under Petty Officer George E. Antell,[1] O.N. 232634 (*Lion*). These he sent to the eastward and the Petty Officer on board, as he had been wounded in the hand and arm before landing, and although in great pain had carried on most gallantly.

75. The situation now was that Mr. Adams' few men and the two Lewis gunners were beyond the look-out station, protected from the machine-gun fire from the direction of the Mole head, but exposed to that from the destroyers alongside the Mole, and the men were being hit apparently by machine guns and pom-poms. Lieutenant-Commander Harrison arrived at this time; this gallant officer was severely wounded in the head on board *Vindictive* before coming alongside, but directly he recovered consciousness he joined his section on the Mole; on receiving Mr. Adams' report he directed him to try and get more men. Major Weller, Commanding the Royal Marines, on receiving Mr. Adams' report, despatched Lieutenant G. Underhill[2] with reinforcements to assist Mr. Harrison. Whilst this party was being collected, Mr. Adams returned to the look-out station,

[1] Received the D.S.M.

[2] Received the D.S.C.

where he was informed that Mr. Harrison had led a rush along the parapet and that he and several of his men had been killed by machine-gun fire. Able Seaman McKenzie,[1] one of B Company's machine gunners with Mr. Harrison, did good execution with his gun, though wounded in several places, and Able Seaman Eaves* was killed in attempting to bring in Mr. Harrison's body.

76. About this time the recall was sounded, and Mr. Adams therefore withdrew his men from the parapet and Mole, collected the wounded, and sent them to the *Vindictive*. He himself went along the parapet in search of Mr. Harrison, but not finding him, returned to assist in the re-embarkation. As originally planned, Mr. Harrison's bluejacket storming parties were to deal with the battery on the Mole head and Mole extension only, but for the reasons given in paragraph 71 they started 400 yards further from their objectives than was intended, with the intervening ground fully exposed to machine-gun fire. Mr. Adams and his men, and later Mr. Harrison, pressed their attack most gallantly, and, though denied a full measure of success, it appears probable their fire prevented the 4·1 inch battery at the Mole head coming into action, as these guns did not open fire at the blockships (see paragraph 94).

77. *Marine Storming Party.*—The Royal Marines of this expedition were drawn from the four divisional headquarters and the Grand Fleet. The battalion was to provide the officers and men of the storming force, the crews of four Stokes guns, one 11-inch howitzer, five pom-poms, and some Lewis guns of the *Vindictive's* armament, and a few men to work with the Naval demolition

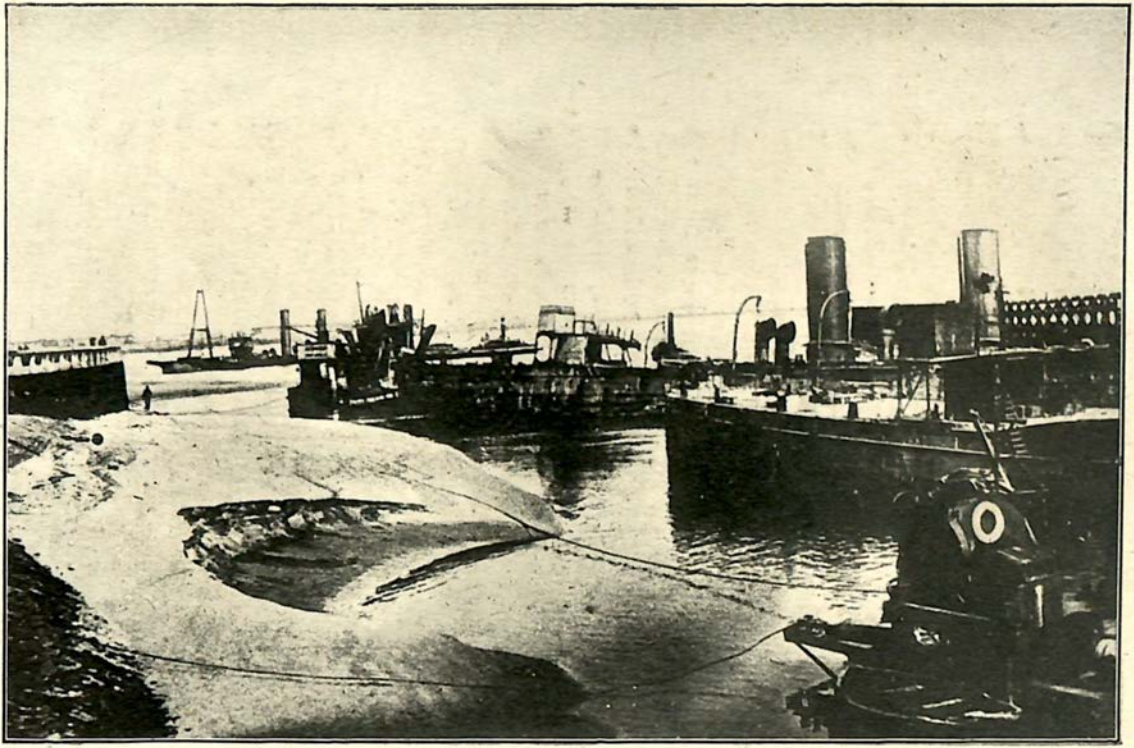
[1] Received the V.C.

* NOTE.—Able Seaman Eaves, it appears, was not killed, but was very severely wounded and taken prisoner.

party. It was carried to Zeebrugge in the *Vindictive*, except A Company, two Vickers guns of the machine-gun section, and two Stokes guns, which went in *Iris II.* All had taken part in the special training and practices already referred to, the howitzer crews having been put through a course at Shoeburyness.

78. The first objective of the Royal Marine Battalion was a fortified zone situated about 150 yards from the seaward end of the Mole proper; its capture was of the first importance, as an enemy holding it could bring a heavy fire to bear on the parties landing from *Vindictive.* This objective being gained, the Royal Marines were to continue down the Mole[1] and hold a position so as to cover the operations of the demolition parties from an attack by enemy troops advancing from the landward end of the Mole. The destruction of the viaduct by Submarine C 3 was intended to assist in this, by preventing reinforcements reaching the Mole from the shore. Owing to *Vindictive* coming alongside to landward of this zone, the Royal Marines were faced with the double duty of preventing an enemy attack from the shore end and of themselves attacking the fortified zone. The casualties already sustained and the fact that *Iris II* could not remain alongside to land her company of Royal Marines (see paragragh 63) left insufficient men in the early stages of the landing to carry out both operations. The situation was a difficult one, for to attack the fortified zone first might have enabled the enemy to advance up the Mole and seize positions abreast *Vindictive* with the most serious consequences to the whole landing force, whereas by not

[1] The fortified zone lay to the west or right of the berth *Vindictive* was intended to take. In fact it lay to the east of her position owing to *Vindictive's* mischance, leaving its assault to the Naval storming party. See plan on p. 110.



THE SUNKEN SHIPS AT ZEEBRUGGE (September, 1918)

NOTE.—The photograph was taken at low water looking out to sea between the timber piers of the Canal entrance; Mole on left of the picture.

attacking the fortified zone the guns at the Mole head could not be prevented from firing at the blockships. As will be seen in subsequent paragraphs, the Royal Marines first secured the landward side, after which an assault was organised against the fortified zone, but the unavoidable delay prevented this attack from being carried through before the blockships had passed in and the recall sounded. Major Weller's action was correct; lack of men prevented him reinforcing the bluejacket storming parties under Mr. Harrison and Mr. Adams, who had in consequence to attempt an assault on a very strong position with the depleted A and B Companies, and without the assistance of D Company, which could not be landed in time from *Iris II* (see paragraph 63). How heroically they failed has been related in paragraphs 72 to 75.

79. No. 5 Platoon (Lieutenant T. F. V. Cooke [1]) was the first to land, and proceeded to the right (west) along the parapet. They silenced a party of snipers who were firing from near No. 2 Shed into the men landing. Captain and Adjt. A. R. Chater [1] initiated this, which Major Weller considers greatly assisted the disembarkation. Captain Bamford [2] now joined, and with Lieutenant Cooke and this platoon reached a position some 200 yards from the *Vindictive*; their action greatly assisted the advance along the Mole, they themselves being exposed to a galling fire. Lieutenant Cooke, who set a fine example, was twice wounded, and was rendered unconscious; he was most gallantly carried back to the *Vindictive* by Private John D. L. Press,[3] R.M.L.I., who was himself wounded.

80. No. 9 Platoon and the remnants of No. 10, under Lieutenant C. D. R. Lamplough,[4] were the next to land:

[1] Received the D.S.O.
[2] Received the V.C.
[3] Received the C.G.M.
[4] Received the D.S.C.

They descended from the parapet to the Mole (a drop of 15 feet) by means of ropes, and proceeded to establish a strong point at the shoreward end of No. 3 Shed, to prevent possible attack from that direction. This unit later attacked a destroyer alongside the Mole, inflicting damage on the craft and crew.

81. Units were now rapidly landing, and No. 7 Platoon (Lieutenant H. A. P. de Berry) succeeded in placing their heavy scaling ladders in position, and then formed up to support Nos. 9 and 10 Platoons. The successful placing of the scaling ladders was largely due to Sergeant-Major C. J. Thatcher.[1] Major Weller then received information that the naval storming party needed reinforcements. He therefore despatched No. 12 Platoon and the remnants of No. 11, under Lieutenant G. Underhill,[1] to their assistance. These platoons advanced to the left (east) along the parapet, and reached the look-out station, where they were checked by machine-gun fire; Mr. Adams and his men were some 40 to 50 yards ahead of them, and both parties could make no headway along the exposed parapet. Meanwhile No. 5 Platoon, which had been recalled from its advanced position, with Nos. 7 and 8 Platoons, all under Captain Bamford, were forming up on the Mole for an assault on the fortified zone and the 4·1 inch battery at the Mole head. This attack was launched, but before it could be developed the general recall was sounded. The units fell back in good order, bringing their wounded with them. The passing of the men from the Mole on to the parapet by means of the scaling ladders was rendered hazardous by the enemy opening fire at that portion of the Mole, several ladders being destroyed; the men were sent across in small batches from the comparative shelter afforded

[1] Received the D.S.C.

by No. 3 Shed, such rushes taking place as far as possible in the intervals between the enemy's bursts of fire.

82. *The Demolition or C Company.*—This company was under the orders of Lieutenant Cecil C. Dickinson[1] (*Resolution*), and was divided into three parties, Nos. 1 and 3 consisting of Sub-Lieutenant Felix E. Chevallier[2] (*Iron Duke*) and twenty-nine ratings in the *Daffodil*, and No. 2 of Lieutenant Dickinson and twenty-one ratings in the *Vindictive*. Twenty-two rank and file, R.M.L.I., were attached for the transport of the explosive equipment.

83. Lieutenant Dickinson and No. 2 party landed after the Naval Storming Parties and assembled on the pathway of the parapet, which became somewhat crowded before the scaling ladders could be got into position to enable the men to descend on to the Mole. No. 2 party then proceeded to No. 3 shed. The heavy fire from the destroyers alongside the Mole prevented any advance towards the shore, and the demolition of this shed was therefore impracticable; charges were, however, placed and everything prepared in case an opportunity for its destruction occurred. An attempt was made to place a charge alongside the destroyers, but was repulsed by their fire. Some bombs were therefore thrown on board. The enemy's shell fire at this portion of the Mole became very heavy, and the recall being sounded, the party re-embarked under the conditions related in para. 81.

84. The demolition party was on the Mole about 55 minutes, and it was solely on account of the proximity of our own storming parties that no destruction took place. This party, ably led by Lieutenant Dickinson, behaved in a most cool and undisturbed manner both during the approach (when they suffered severely) and

[1] Received the D.S.O. [2] Promoted to Lieutenant.

on the Mole. After returning on board the extra explosives, etc., were jettisoned, as they were then only a danger to the ship. The preparation of the demolition scheme and organization of the company for carrying it out was very efficiently planned by Lieutenant-Commander Francis H. Sandford, D.S.O.,[1] borne for special service on my Staff.

85. *Experimental Party.*—The account of the attack on the Mole would not be complete without reference to the contribution in officers and men made by a detachment from the Admiralty Experimental Station at Stratford, and the work done by them. This detachment was commanded by Lieutenant Graham S. Hewett, R.N.V.R., with Lieutenant A. L. Eastlake, R.E., second-in-command. It contributed thirty-four men, all volunteers, for the working of the fixed and portable flame-throwers, phosphorus grenades, etc., either on board *Vindictive*, *Iris II*, and *Daffodil*, or with the various naval and marine parties landed on the Mole. The fixed flame-throwers in *Vindictive* were put out of action by enemy shell fire. The portable ones accompanied the seaman and marine landing parties, the personnel of the experimental party sharing the difficulties and dangers of the assault. Lieutenant Hewett specially mentions Air-Mechanics W. H. Gough and W. G. Ryan for good service during the attack on the Mole.

86. *Destruction of Viaduct.*—The object of this part of the attack on the Mole was to prevent reinforcements from the land passing on to the Mole during the operations. It was proposed to do this by exploding one or two old submarines in contact with the iron piers and cross-ties of the viaduct. It was calculated that a C class submarine at a speed of 6 knots would penetrate the light bracing of the piers up to her conning tower.

[1] Promoted to Commander.

87. To enable the submarine to be abandoned and continue her course automatically, C 1 and C 3 were fitted with gyro-control. A picket boat was provided for the escape of the crew, and each submarine had two motor skiffs, they also carried a light scaling ladder each, so that in case all other means of rescue failed, they might climb on to the viaduct and escape along it from the effects of the explosion. Exploding charges, primers, battery, and switch gear were devised and fitted. These three craft were towed by T.B.D.s *Trident* and *Mansfield* to certain positions, whence they proceeded under their own power.

88. Submarine C 3 (Lieutenant Richard D. Sandford [1]) proceeded on the courses laid down, and duly sighted the viaduct right ahead, distance about a mile and a half. Shortly after this, by the light of star shell, fire was opened on C 3, apparently from 4-inch guns, but was not long maintained. When the viaduct was about half a mile off, a flare on the far side silhouetted the Mole and viaduct, which appeared about two points on the port bow. Two searchlights were then switched on to C 3, and off again, possibly in order that the submarine might run into the viaduct and be caught. By this time the viaduct was clearly visible. One hundred yards away, course was altered to ensure striking the viaduct exactly at right angles. C 3 struck exactly between two rows of piers at a speed of nine and a half knots, riding up on to the horizontal girders of the viaduct, and raising the hull bodily about two feet; she penetrated up to the conning tower.

89. The crew, having mustered on deck before the collision, lowered and manned the skiff. The fuses were then ignited and the submarine abandoned, the skiff's

[1] Received the V.C.

course being set to the westward against the current. Her propeller having been damaged, oars had to be used. Immediately the skiff left the submarine, the two searchlights were switched on, and fire was opened with machine guns, rifles, and pom-poms, the viaduct being lined with riflemen firing under the wind screen, and the houses on the inner end of the Mole opening on her with pom-poms. The boat was holed many times, but was kept afloat by special pumps which had been fitted. Mr. Sandford (twice) and two of the crew were wounded at this time. As only slow progress could be made against the current, the charge exploded when the skiff was but two or three hundred yards from the viaduct. The explosion appeared to have great effect, much débris falling into the water around. Both searchlights immediately went out, and firing became spasmodic. The picket boat was then sighted, and the skiff's crew taken on board, the wounded being finally transferred to the T.B.D. *Phœbe*. Mr. Sandford describes the behaviour of all his crew as splendid, and worthy of the high traditions of the submarine service. He selects his next in command, Lieutenant John H. Price, D.S.C., R.N.R.,[1] for mention, and states that his assistance was invaluable, and his conduct in a position of extreme danger exemplary. To this modest praise of the exploit I would add that the officers and men, who eagerly undertook such hazards, are deserving of their Lordships' highest recognition. They were all well aware that if their means of rescue failed them, as through untoward circumstances it nearly did, and they had been in the water at the moment of the explosion, they must almost inevitably have been stunned and drowned, or killed outright, by the force of such an explosion. Yet they disdained to use

[1] Received the D.S.O.

the gyro-steering which would have enabled them to abandon the submarine at a safe distance, and preferred to make sure, as far as was humanly possible, of the accomplishment of their duty.

90. Submarine C 1 (Lieutenant Aubrey C. Newbold), owing to delay caused by the parting of the tow, did not arrive in the vicinity of the viaduct till the retirement had commenced. He had previously seen a big flash, but had not heard any sound, and was therefore in doubt as to what the force in general had done, but realized that his boat might be required for another occasion. He therefore retired, though he and his crew immediately volunteered for similar service. They were naturally disappointed, but in my opinion Lieutenant Newbold was perfectly right, and their Lordships will not lose sight of the fact that they, equally with the officers and men of C 3, eagerly embarked on the enterprise in full realization of what the consequences might well be.

91. The picket boat employed for rescuing the crew of C 3 was commanded by Lieutenant-Commander Francis H. Sandford, D.S.O., who had organised the method of attack on the viaduct. The picket boat displayed bad qualities when towed above a certain speed in the prevailing conditions of wind and sea. She was steered only with great difficulty, and was twice on her beam ends, being saved from total capsize by the tow parting. She then proceeded under her own steam, and endeavoured to reach the viaduct before the explosion. Her speed was not as much as was expected; still, she arrived in time to pick up the motor-skiff very shortly after the explosion, and transferred the officers and men to the *Phœbe*. This boat subsequently returned to Dover under her own steam, as her fore compartment being holed and full of water made towing inadvisable. From

first to last she had made a voyage of 170 miles to and from the Belgian coast in unpleasant conditions, and effected the rescue in the face of almost insurmountable difficulties, due to enemy action, weather, and tide. I have already recommended Lieutenant-Commander Francis Sandford for promotion on this and previous grounds.[1] His boat's crew were all volunteers, and I am including them in my general list of recommendations to their Lordships' notice.

VIII.—Blocking Operations.

92. The blocking of the Bruges Canal and the entrance to Ostend Harbour was the principal part of the whole objective, the damage to the Zeebrugge Mole being subsidiary thereto. To the *Intrepid*, *Iphigenia*, and *Thetis* was assigned the duty in the Bruges Canal; *Brilliant* and *Sirius* being detailed for Ostend.

93. *Zeebrugge.*—The orders to the blockships were to proceed into the canal. If her two consorts were seen to be following, the leading vessel (*Thetis*) was to ram the lock gates; the second and third (*Intrepid* and *Iphigenia*) were to be run ashore near the entrance at the southern end of the piers, this being the narrowest part of the channel and the position best calculated to block the channel by silt. This opinion as to the best position was based on local knowledge, and the decision to attempt the project in this way was come to after much consideration, and bearing in mind the fact that if the leading vessel should fail to block the lock gates, and should sink in the channel short of the gates, she would have been no obstruction; whereas two ships well athwart the channel at the entrance would be certain to set up silt and cause great inconvenience to the enemy.

[1] Promoted to Commander.

94. The proceedings of these ships were as follows:—

Thetis (Commander Ralph S. Sneyd, D.S.O.[1]).—Sighted the Zeebrugge Mole ahead, and signalled the fact to the ships astern. She was greatly assisted by rockets fired from *Vindictive*,[2] which showed up the Mole extension and the lighthouse, and also by Captain Ralph Collins[3] in a motor launch, who hailed the *Thetis* and gave her the bearing of the lighthouse. After rounding the latter the barge-boom came into view, and *Thetis* was steered for the barge furthest from the Mole, opening fire at the lighthouse, and then at the barge, which is reported from subsequent observation to have been sunk. The ship was under a fairly heavy fire from the light guns on the Mole extension, but her captain did not see any firing from the 4·1-inch battery at the Mole head. As the ship approached what appeared to be an opening between the barges and the net obstruction extending to the south-eastward from them she commenced to swing to port. She was given full port helm, but ran into the nets between the two end buoys, and, continuing to forge ahead, took the nets with her. The piers of the canal entrance were in sight when both engines were reported to have brought up. *Thetis* had thus cleared the net obstruction away enough to enable the ships following to pass to starboard of her, and she signalled to them to do so. Being then about 300 yards from the eastern pier-head, and having drifted slightly to port (shoreward), she appears to have grounded. She had a list to starboard, and was settling down, having been frequently holed along

[1] Promoted to Captain.

[2] They were fired, according to the Press Bureau Narrative (*supra*, p. 55), from the stern cabin of *Vindictive* by one of Commander Brock's firework experts who had never been to sea before.

[3] Received the C.B.

the starboard side by gunfire. She continued to be hit from the Mole, from craft alongside it, and from guns on shore east of the canal. One or two machine guns were also firing at the ship, her 6-inch forecastle gun engaging these guns until her own smoke made it impossible to see. Communication with the engine-room having broken down, a messenger was sent, and Engineer Lieutenant-Commander Ronald C. Boddie[1] (*Hercules*) succeeded in starting the starboard engine, which moved the ship ahead; and being still aground aft, her head swung to starboard into the dredged channel. As she appeared to be sinking, the commander cleared the boiler rooms, sent the boat-keepers to their boats, ordered the smoke to be turned on and the ship to be abandoned. Owing to the death of the petty officer in charge of them, the forward firing keys were not in position; smoke and shell fumes prevented their being found, so that the charges were fired by the after keys; they detonated well, and the ship then quickly sank. The ship's company manned the one remaining cutter and pulled to M.L. 526 (Lieutenant Hugh. A Littleton,[1] R.N.V.R.), which was lying near. Although crowded and holed in two or three places, the cutter was got away without confusion, due to the exertions of Lieutenant George A. Belben[2] (*Penelope*), Commander Sneyd and Lieutenant Francis J. Lambert[2] (*Sir John Moore*) being at this time disabled by gas.

95. *Intrepid* (Lieutenant Stuart S. Bonham-Carter,[1] *Emperor of India*).—This ship had been unable to get rid of her spare watch of stokers, owing at first to the delay in her motor launch getting alongside, and apparently to the disinclination of the surplus crew to miss the coming fight. She therefore proceeded to the canal with 87 officers and men on board instead of 54. On approaching

[1] Received the D.S.O. [2] Received the D.S.C.

the Mole she came under heavy shrapnel fire. She rounded the lighthouse and, directed by *Thetis*, aground on her port hand, steered for the canal, very few enemy guns firing at her, as they were concentrated on the Mole —doubtless at *Vindictive*—and on *Thetis*. On reaching his position in the canal, Lieutenant Bonham-Carter went full speed ahead with the starboard engine and full speed astern with the port helm hard a starboard. He then waited for the crew to get into the boats, but finding the ship was making stern way he had to blow the sinking charges before the steaming party could get out of the engine-room. Engineer Sub-Lieutenant Edgar V. Meikle, with his men, got into a cutter, of which he took charge, proceeding out past the *Thetis* till picked up by a motor launch. Another cutter was picked up by the T.B.D. *Whirlwind*, and the skiff by M.L. 282. With the two officers and four petty officers Lieutenant Bonham-Carter launched a Carley raft and went down the canal until picked up by motor launch 282. This motor launch came right into the canal under the stern of the *Iphigenia* —the next blocking ship—under a heavy fire. She was commanded by Lieutenant Percy T. Dean,[1] R.N.V.R., whose conduct Lieutenant Bonham-Carter describes as 'simply magnificent'. I have had the pleasure of recommending this officer to their Lordships for promotion, and I consider his gallant conduct is well worthy of the Victoria Cross. With the exception of Stoker Petty Officer Harold L. Palliser (O.N. 226201), who was killed while in the motor launch by a machine gun, the whole crew got away. Lieutenant Bonham-Carter reports the exceptionally fine behaviour of the whole of his crew—deck and engine-room alike—and specially mentions Lieutenant Alan Cory-Wright[2] (*Ramillies*), Sub-Lieutenant

[1] Received the V.C.

[2] Received the D.S.C.

Dudley A. Babb [1] (*Sarpedon*), and Engineer Sub-Lieutenant Meikle.[2] In another letter I have recommended Lieutenant Bonham-Carter and the two last-named officers for promotion. I may say here that I regarded the chances of escape from any of the blocking ships as very slender, and this was well known to those who so readily volunteered for this hazardous service, and to the volunteer crews of the motor launches who ran equal risks in their work of rescue.

96. *Iphigenia* (Lieutenant Edward W. Billyard-Leake,[3] *Fearless*).—This ship, like the preceding one, did not discharge all her engine-room ratings, because some managed to avoid it in order to take part in the fight, and they therefore joined up with the rest of the crew. The *Iphigenia* was the third and last of the Zeebrugge blockers to undertake her duty, and it is no disparagement to the predecessors, who made her task the easier by their example, to say that she was, as I believe, completely successful. On approaching the Mole she came under shrapnel fire, and was lighted up by two searchlights on the western (or land) end of the Mole, and by flares, these latter being rendered useless to the enemy by the smoke-screen, and facilitating navigation for the attacker. On rounding the lighthouse the *Iphigenia* went full speed, a star shell showing up the *Intrepid* headed for the canal and the *Thetis* aground. As she approached *Thetis* that ship showed a green light on her starboard side which enabled Lieutenant Billyard-Leake to find the canal entrance. The ship was now hit twice on the starboard side, one shell cutting the siren steam-pipe and enveloping the fore part of the ship in steam.

[1] Promoted to Lieutenant.
[2] Promoted to Temporary Engineer-Lieutenant.
[3] Received the D.S.O.

97. As *Iphigenia* approached the canal entrance it became obscured by smoke, and her captain found that she was heading for the western pier. Going full speed astern he brought his ship in between a dredger and a barge, severing them. He then went ahead with his starboard engine and drove the barge into the canal. When clear of the barge he went ahead with both engines. Seeing that the *Intrepid* had grounded on the western bank of the canal, with a gap between her and the eastern bank, he steered to close the gap, and collided with the port bow of *Intrepid*. He then rang the alarm-gong to signify the imminent blowing of the sinking charges, but finding that he was not completely blocking the channel he telegraphed to the engine-room to go astern, which was done. As soon as his ship was clear he sent Lieutenant Philip E. Vaux[1] (*Marvel*), the First Lieutenant, to the engine-room with an order to go ahead, which was promptly obeyed. The entire entrance was then covered in smoke. As soon as he considered the ship had headway, he put the port engine astern, the starboard ahead, and his helm hard-a-starboard, and grounded on the eastern bank. He then abandoned ship and fired his charges, which all exploded. The company left the ship in one cutter, as the other one was badly damaged. While in the cutter the crew came under more shrapnel and machine-gun fire, which caused some casualties. When trying to pull clear of the ship, M.L. 282 (Lieutenant Percy T. Dean, R.N.V.R., whose conduct in rescuing the officers and men from the *Intrepid* has already been described) was sighted across the *Iphigenia's* bows, and the cutter pulled to her. The majority of the crew got into the motor launch, which then went astern. The cutter also pulled round the stern of the ship and

[1] Received the D.S.C.

the launch took the rest on board, except three, one of whom was killed. The cutter was made fast to the stem of the motor launch, which went out of the harbour stern first at full speed. Lieutenant Billyard-Leake reports that this motor launch was entirely responsible for saving the survivors from the *Iphigenia*. Heavy machine-gun fire was concentrated on her while on passage out, at which time Sub-Lieutenant Maurice C. H. Lloyd,[1] D.S.C. (*Dominion*), was mortally, and Lieutenant James C. Keith Wright,[2] R.N.V.R., of M.L. 416, dangerously wounded, and two of the motor launch's crew of four killed. I trust that the Lords Commissioners, who have so many claims to judge, will consider that this recital of the part played by the *Iphigenia* well justifies my mention of Lieutenant Billyard-Leake and of Mate (E) Sydney Greville West[2] (*Benbow*), who throughout the preparations and operation worked his department in an admirable manner.

98. *Brilliant and Sirius.*—I regret that the effort to block Ostend did not succeed. The *Brilliant* (Commander Alfred E. Godsal,[3] *Centurion*), with *Sirius* (Lieutenant-Commander Henry N. M. Hardy,[4] D.S.O., *Patrol*) in her wake, was approaching the charted position of the Stroom Bank Buoy, but did not sight it as expected. Deducing from the positions of other navigation marks already passed that the ships were to the northward of their supposed position, they continued on their original course for an extra two minutes, sighting the buoy to the north-eastward. They steered to pass to the northward of the buoy, at which time they first came under fire from the enemy's batteries, and then shaped a course for the deduced position of Ostend. No marks were visible owing to smoke, which made it necessary for *Sirius* to

[1] Received bar to D.S.C.
[2] Received the D.S.C.
[3] Received the D.S.O.
[4] Promoted to Commander, R.N.

keep very close station on *Brilliant*. When the Ostend Piers should have been seen by *Brilliant*, breakers were observed on the starboard bow, and, though the helm was starboarded, the ship grounded. *Sirius*, observing this, immediately put her helm hard over and her engines full speed astern, but the ship, being already badly damaged by gunfire and sinking, did not answer the helm, and collided with the port quarter of the *Brilliant*. In the end, both ships being practically fast ashore, *Brilliant*, with her port engine immovable, and *Sirius*, in sinking condition, were blown up where they stranded, as observation has since shown, about 2,400 yards east of the canal entrance. Lieutenant A. C. Crutchley[1] (*Centurion*), Sub-Lieutenant Angus H. Maclachlan[2] (*Téméraire*), and Engineer Lieutenant Wilfred Long[1] (*Dublin*), all serving in the *Brilliant*, were reported by their captain as having set a fine example to their men. Commander Godsal also mentions Petty Officer Joseph J. Reed[3] (O.N. C230360), who behaved with conspicuous coolness.

99. The rescue of the crews by motor launches, which had been standing by under heavy fire of every calibre, was carried out in the gallant manner which distinguished the work of the crews of the motor launches and coastal motor boats throughout the action. Commander Ion Hamilton Benn,[4] R.N.V.R., attempted to go alongside in motor launch No. 532, but owing to thick smoke she was damaged by collision with the ship. Lieutenant Roland Bourke,[5] R.N.V.R., in M.L. 276, repeatedly went alongside *Brilliant* in the difficult circumstances of her

[1] Received the D.S.C.
[2] Promoted to Lieutenant, R.N.
[3] Received the D.S.M.
[4] Promoted to Temporary Acting Captain, R.N.V.R.
[5] Received the D.S.O.

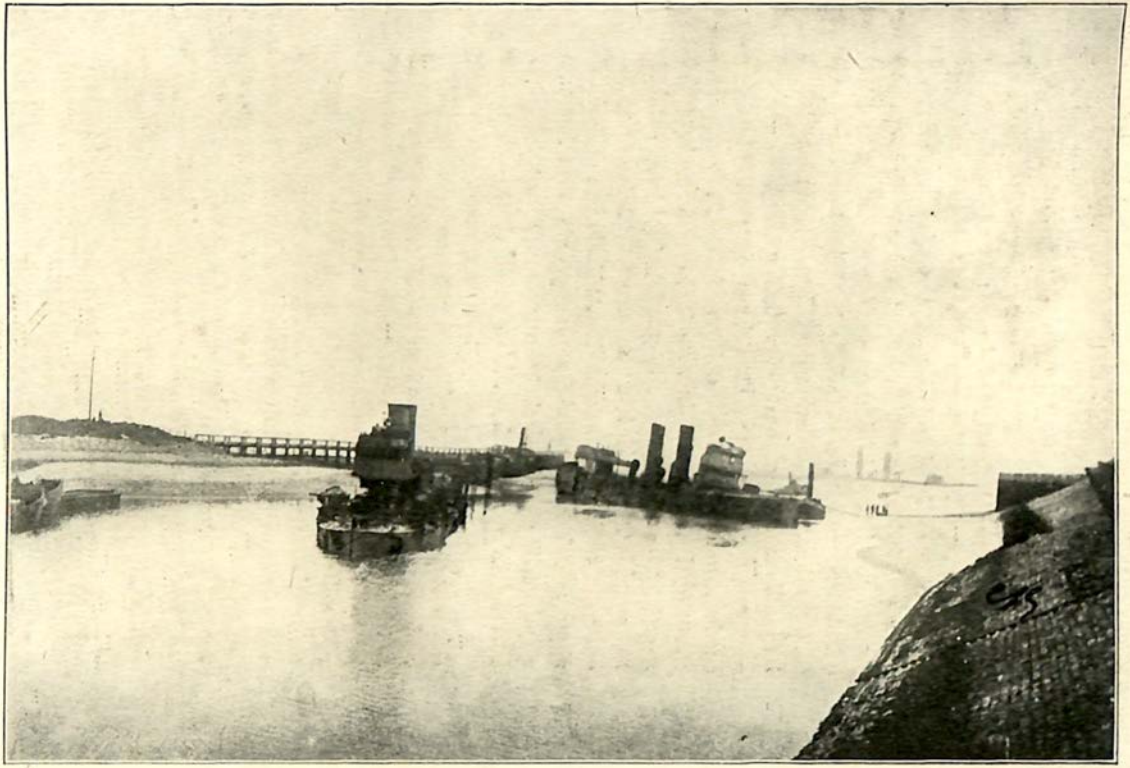
starboard engines still going astern, while M.L. 283, under the command of Lieutenant Keith R. Hoare,[1] D.S.C., R.N.V.R., embarked practically all the men from the *Sirius*, and sixteen from the *Brilliant's* whaler, sunk by gunfire.

100. After leaving the *Sirius*, Lieutenant-Commander Hardy found that Engineer Lieutenant William R. Maclaren[2] (*Iron Duke*) and some men were missing. He therefore hailed C.M.B. 10 (Sub-Lieutenant Peter B. Clarke,[2] R.N.R.), and with Lieutenant Edward L. Berthon,[3] D.S.C. (*Viceroy*), went alongside the ship under a heavy and accurate fire from 4·1-inch and machine guns to search for them, but found no sign of life in either ship. The officer and men were subsequently picked up by the *Attentive* in a boat, in which they had pulled thirteen miles out to sea after the sinking of their ship.

101. Their Lordships will share with me and the commanding officers of these ships the disappointment due to the defeat of our plans, as we may believe, by the legitimate ruse of the enemy in shifting the buoy. As the Commodore at Dunkirk remarks in the despatch to which their Lordships will refer for details on this point, the location of buoys by aircraft is a high art, and can only be done with accuracy in relation to closely surrounding land or shoal features, but aerial photographs have since established the fact that had the buoy been in its original position the vessels would have made the entrance accurately.

102. Both Commander Godsal and Mr. Hardy immediately and repeatedly asked me for other ships, to be allowed to try again. They report that all their officers and Petty Officer Joseph Reed have volunteered to make

[1] Received the D.S.O. [2] Received the D.S.C.
[3] Received a bar to D.S.C.



THE SUNKEN BLOCK-SHIPS IN THE CANAL, ZEEBRUGGE
A Second View

another attempt, sanguine that with the experience gained it would succeed.

IX.—The Retirement.

103. The viaduct explosion having duly taken place, and the blocking ships having been seen proceeding shorewards, the main object of storming the Mole had been accomplished, and the only reason for prolonging the operation till the programme time for retirement was that of continuing the work of demolition. On the other hand, the only guns in *Vindictive* bearing on the Mole had been put out of action; the upper works of the ship and men in exposed positions were presenting an easy target to the shore guns, while, in view of the failure of the Mole anchors, the storming parties would be unable to embark if the *Daffodil* should be disabled. Captain Carpenter, regarding the *Daffodil's* escape up to this time as being almost a miracle, therefore decided to give the order for the retirement, and in this I consider he acted with good judgment; in fact, I had given orders for the *Warwick* to close the *Vindictive* so that I might inform Captain Carpenter that I had seen the blockships proceeding in, ascertain the conditions on the Mole, and decide on further action, when I saw that she was hauling off.

104. The searchlights, by which twenty minutes' warning was to be given, having been destroyed, as well as the *Vindictive's* siren, by which the executive signal was to be made, the *Daffodil* made the latter signal at fifty minutes past midnight, and the retirement commenced. About fifteen minutes later it was reported to the Captain that officers and men had ceased coming on board, a large number having already embarked by the same means as they had originally used for storming

the Mole. To make doubly sure, Captain Carpenter waited till ten minutes past one, and after repeated assurances from officers and his own observation that no more were returning, he ordered *Daffodil* to tow *Vindictive's* bow away from the Mole, the port cable was slipped, and towing commenced. The hawser parted almost at once, but the ship's head was clear enough to allow her to proceed at full speed with helm hard-a-port under cover of her own smoke screen. A large bumpkin made of her own mainmast, rigged out over the *Vindictive's* port quarter, and taking against the wall, protected the port screw, which nevertheless hung up two or three times, being probably fouled by the débris of the brows. The *Vindictive* reached Dover soon after 8 a.m., on the 23rd.

105. Some of the proceedings of *Iris II* have been reported in connection with the storming of the Mole, and the rest may be told here. Shortly after leaving the Mole she came under a very heavy fire from the Mole and shore batteries, being hit ten times by small shell and twice by large ones. The first large shell came through the port control position and carried away the port side of the bridge, causing a very serious fire amongst the ammunition and bombs under the bridge. It mortally wounded Commander Valentine Gibbs and Major Charles E. C. Eagles, D.S.O., R.M., and seriously wounded Lieutenant George Spencer, D.S.C., R.N.R. Lieutenant Oscar Henderson[1] ('P. 19') took a volunteer fire party with a hose on to the upper deck to quench the fire, but seeing the condition of the bridge he ran up on to it and found Commander Gibbs, as he then thought, dead, and Lieutenant Spencer seriously wounded, but still conning the ship. He took command and steadied the ship on her course, the coxswain, Petty Officer David

[1] Received the D.S.O.

P. Smith,[1] sticking to his post with great gallantry, steering with one hand while holding an electric torch to the compass with the other; it is due to Lieutenan Spencer that the ship was turned away from the land. *Iris II* was again hit by three shells simultaneously, and as the men were packed very closely on the main deck the casualties were very heavy. When the ship was steadied on her course the fire was put out, Able Seaman F. E. M. Lake[1] (*Monarch*) being the first man to attack it, which he did with sand, afterwards helping Mr. Henderson to throw bombs overboard, regardless of his own life. A motor launch, No. 558, commanded by Lieutenant-Commander Lionel S. Chappell, D.S.C., R.N.V.R., and with Captain Ralph Collins[2] on board, gallantly came into the heavy fire from the enemy's guns, and throwing a smoke screen around *Iris II* enabled her to get clear, the ship being very badly damaged; she reached Dover at 2.45 p.m., some five hours after the death of her captain, who remained confident and cheerful until his very heroic spirit passed.

106. Although the Lords Commissioners of the Admiralty have most promptly recognised and rewarded the services of Acting Captain Carpenter[3] by promoting him to the Post List, I should not like to end this part of my despatch without putting on record the praise which is due to him. An excellent staff officer, he rendered me invaluable assistance in the drawing up of the final operation orders, the preparations for which involved strenuous work by many officers and a vast amount of necessary detail. My account of the proceedings of the *Vindictive* outlines his personal share in the

[1] Received the C.G.M. [2] Received the C.B.
[3] Received the V.C.

attack, but as showing the force which his example had on those under his command, I hear on all sides that the Captain's calm composure when navigating mined waters and bringing his ship alongside the Mole in darkness, and his great bravery when the ship came under heavy fire, did much to encourage similar behaviour on the part of the crew, and thereby contributed greatly to the success of the operation.

X.—Ostend.

107. In arranging the sections of this despatch, I have grouped proceedings of units taking part in the operations off Ostend in their appropriate places, but I submit herewith the report by Commodore Hubert Lynes,[1] C.M.G., Senior Naval Officer at Dunkirk, to whom I am indebted for whole-hearted co-operation and loyal assistance at all times. I share his regret as to the alteration by the enemy of the position of the Stroom Bank Buoy not having been discovered, but I feel that the consequence must be accepted as one of the misfortunes of war.

108. The Lords Commissioners will notice that five French torpedo craft co-operated at Ostend with our big monitors, and four French motor launches with our small monitors. I should like to be allowed to express my gratification at this co-operation, and my thanks for the valuable assistance these vessels gave are due to Vice-Admiral Pierre Alexis M. A. Ronarc'h, K.C.B., C.M.G., Commandant Supérieur de la Marine dans la zone des Armées du Nord, Dunkerque, and to Capitaine de Vaisseau Breart de Boisanger, D.S.O.

109. Commodore Lynes has recommended for special recognition several officers and men, and the rest their

[1] Received the C.B.

Lordships will have an opportunity of considering in the list which I am forwarding as soon as it can be prepared.

XI.—Torpedo-Boat Destroyer Force.

110. I desire to relate the proceedings of some of the vessels of the 6th Destroyer Flotilla under the command of Captain Wilfred Tomkinson,[1] and the *Warwick* flying my flag, which came under my own observation, or are of special interest or merit.

111. The *Trident* and *Mansfield* after parting company from their submarines, covered the western flotilla of smoke-screening small craft. The *Whirlwind*, *Myngs*, *Velox*, *Morris*, *Moorsom*, and *Melpomene* covered the eastern smoke-flotilla. The *Warwick*, *Phœbe*, and *North Star* cruised off the Mole to protect the assaulting craft from torpedo attack. These duties took the destroyers close in shore, and they were frequently under a heavy fire from guns of all calibres at short range. When the assaulting craft were leaving the Mole, the *Warwick* followed them for a few minutes, and then returned to assist the withdrawal of the small craft, picking up four motor launches, including No. 282, commanded by Lieutenant P. T. Dean, R.N.V.R. This launch had on board one hundred and one people from *Iphigenia* and *Intrepid*, some of whom had been killed in the launch, and others who were wounded. As the motor launch was dangerously overloaded and full of wounded, I ordered them to be transferred to the *Warwick*, which took more than half an hour to do. I was much struck with the gallant bearing of Lieutenant Dean and the survivors of his crew. They were all volunteers, and nearly all had been wounded and several killed.

[1] Received the C.B.

112. While the *Warwick* was engaged as stated in the preceding paragraph, the *North Star*, having lost her bearings in the smoke, emerged from the smoke screen to the south-eastward of the lighthouse. Seeing some vessels alongside the Mole, she fired all her torpedoes at them and withdrew; but coming under very heavy fire at point-blank range she was immediately disabled, and soon in a sinking condition. The *Phœbe*, commanded by Lieutenant-Commander Hubert E. Gore-Langton,[1] was handled with conspicuous gallantry while under this heavy fire. She repeatedly circled round the *North Star*, making smoke screens and attempting under their cover to tow her out of action. She was twice successful in getting her in tow, the hawser being shot away once and parted once. *Phœbe* then went alongside *North Star*, and endeavoured to tow in that way. *North Star*, however, was in a sinking condition, and being continually hit. In these circumstances, Mr. Gore-Langton ordered the abandonment of the *North Star*, standing by her, and taking off all of her company who were left alive.

113. I regret that the *North Star* was lost, but the conduct of Lieutenant-Commander Kenneth C. Helyar[2] and his company was all that could be desired, the *North Star* not being abandoned until all possibility of salving her was gone. The Lieutenant-Commander of *Phœbe* states that Mr. Helyar by his coolness and calm devotion to duty set a splendid example to all, though his ship was totally disabled and constantly being hit. He would not leave his bridge until ordered twice to abandon his ship when she was obviously sinking under him, and could not be saved. He also did his utmost to assist the *Phœbe* in every way to take him in tow.

114. *Tempest* and *Tetrarch*, of the Harwich Force, ac-

[1] Promoted to Commander, R.N. [2] Received the D.S.O.

companied the Ostend blockships from the Goodwins until they reached the inshore smoke screen off Ostend, after which they co-operated with the Dunkirk destroyers *Faulknor*, flying the broad pendant of Commodore Lynes, *Lightfoot*, *Mastiff*, *Afridi*, *Swift*, and *Matchless*, in supporting the small craft inshore, within close range of the enemy's heavy batteries.

115. I wish to record my entire satisfaction with the good work done by the torpedo-boat destroyer force throughout the operations. The part taken by the *Phœbe* in protecting and endeavouring to tow out of action the *North Star*, and in the final rescue of her people, is a conspicuous example of the fine qualities of this branch of the service, and is highly creditable to Mr. Gore-Langton, his officers, and crew. I have already recommended that officer for promotion, as I consider that his personal and professional conduct on this occasion marks him as likely to be valuable in the higher ranks of His Majesty's service.

XII.—Smoke Screens, Motor Launches, and Coastal Motor Boats.

116. The orders for smoke-screening the approach and operations of the forces attacking Zeebrugge and Ostend, and the reports from the numerous motor launches and coastal motor boats employed on that duty, are necessarily too detailed to be recapitulated in a despatch of this general nature. Apart from the smoke apparatus supplied to the larger craft for self-protection, the duty of making smoke screens and laying smoke floats was imposed on a large fleet of motor launches and coastal motor boats. Without the services of these little vessels for this duty, for rescue work and for inshore work generally, an attack of this nature could hardly have been considered.

117. *Smoke Screens.*—While the wind favoured the screens were efficacious. Captain Ralph Collins,[1] who commanded the motor launches, reports that in some units in which the smoke screens were maintained, and in which most of the boats were under fire, there were no boats hit; whereas, in one instance, which came under my own observation, the absence of a screen led to preventably heavy punishment. As to the smoke floats, the enemy sunk many of them directly they were laid, especially if, as happened in many cases, they emitted flame. Those which remained were effective.

118. *Motor Launches.*—These craft were under the command of Captain Ralph Collins at Zeebrugge, and Commander Hamilton Benn at Ostend. As to the handling of these craft, great credit is due to the leaders of sections for the way in which they led their boats up to the objectives. When the wind shifted, the commanding officers proceeded closer inshore to give as much protection to the attacking ships as possible. One unit, under Lieutenant Gordon S. Maxwell, R.N.V.R., went close inshore, and by dropping three floats without baffles succeeded in inducing the enemy to concentrate his fire on these floats. Lieutenant-Commander Dawbarn Young, R.N.V.R., was in command of M.L. 110. He had volunteered to precede the blockships and light the entrance of the harbour and canal with calcium buoys. Whilst approaching the entrance M.L. 110 was struck by three shells, which killed and wounded half the crew and wrecked the engines. Lieutenant-Commander Young, hit in three places, was mortally wounded, but stuck to his post and gave orders to abandon ship, until he collapsed. This very gallant officer died before reaching Dover. Ever the first to volunteer for any dangerous

[1] Received the C.B.

work, the Dover Patrol has sustained a great loss by his death.

119. Of the meritorious work reported from the motor launches, I have already selected the instances of Lieutenant P. T. Dean,[1] R.N.V.R., in No. 282, and Lieutenant H. A. Littleton,[2] R.N.V.R., in No. 526, who brought off the crews of the sunken blocking ships. There is no doubt that these boats were handled in a magnificent manner, and that the highest praise is due to their officers and men. From Ostend reports of the motor launch flotilla are of the same high character. Commander Ion Hamilton Benn reports that M.L. 283 (Lieutenant Keith R. Hoare,[2] R.N.V.R.) took on board the entire crew of *Sirius* and some of *Brilliant's* people, and was seriously overloaded; but was able to reach harbour safely. He cannot speak too highly of the conduct of Lieutenant Hoare and Lieutenant Roland Bourke,[2] R.N.V.R. (M.L. 276), who both showed remarkable coolness and good judgment throughout the operation. He also mentions Lieutenants, R.N.V.R., Sidney D. Gowing (M.L. 551), Rawsthorne Procter (M.L. 556), and Malcolm S. Kirkwood[3] (M.L. 11).

120. *Coastal Motor Boats.*—I have been greatly impressed with the administrative capacity of Lieutenant Arthur E. P. Welman,[3] D.S.C., R.N., the young officer in charge of the coastal motor boats of the Dover Patrol. In the Zeebrugge operation he had seventeen of these vessels under his orders. Besides their screening duties, several of them undertook attacks on enemy vessels and against the Mole, the seaplane shed, &c., with success, Lieutenant Welman always being in the most exposed position. Sub-Lieutenant Cedric R. L. Outhwaite,[3]

[1] Received the V.C. [2] Received the D.S.O.
[3] Received the D.S.C.

R.N.V.R., in C.M.B. 5, reports that he attacked an enemy destroyer which was under way, and observed his torpedo hit below her forward searchlight, the light shortly afterwards going out, and her fire diminishing. Sub-Lieutenant L. R. Blake,[1] R.N.R., in C.M.B. 7, reports hitting a destroyer alongside the Mole with a torpedo which struck below the fore bridge. No. 32 A fired a torpedo at the steamship *Brussels*. An explosion followed, but the result was hidden by smoke.

121. The zest of most of the young officers in the coastal motor boats, like that of those in the motor launches, compels one's admiration. I can select only one of many instances which show the eagerness of the officers to take part in a fight from which circumstances tried to exclude them. Lieutenant Edward E. Hill in C.M.B. 35 A had the misfortune to foul his propellers on the evening of the 22nd April when already 18 miles on his outward voyage. He got a tow from a drifter, and arrived at Dover at 8 p.m. His boat was immediately hoisted and the propellers cleared, but as there was other damage he was not afloat again till 9.40 p.m. He then made his way to the Belgian coast, and was off Zeebrugge—about 70 miles—by 11.50 p.m., taking up his smoke-float patrol at once, and continuing it for an hour, in the course of which he came under rather heavy fire from a battery at Blankenberghe. The chapter of accidents amongst such small craft is naturally a long one, but the resource developed in overcoming them is more than compensation. The daring way in which the crews of these boats approach the shore, drawing the beams of the searchlights and the fire of the guns, then escaping in their own smoke, is splendid. Lieutenant Francis C. Harrison,[2] who commanded the Ostend section of C.M.B.s, mentions the names of Sub-

[1] Received the D.S.C. [2] Received a bar to D.S.O.

Lieutenant Peter B. Clarke,[1] R.N.R., Midshipman N. S. Herbert, R.N.R., and Chief Motor Mechanic G. H. Hebblethwaite (C.M.B. 10) for the dangerous work which that boat undertook in searching for the engineer of the *Sirius*, who was thought to be on board that ship after she had been sunk, in the course of which the boat came under very heavy fire; and Sub-Lieutenant Frank A. W. Ramsay (C.M.B. 19) for his coolness and quickness in laying the inshore calcium buoys under heavy machine-gun fire. Lieutenant Welman also mentions the names of several officers and men in coastal motor boats; these will be forwarded for Admiralty consideration shortly.

XIII.—Dover Trawler Patrol.

122. Captain William V. Howard, D.S.O., of the Trawler Patrol, accompanied the expedition in the paddle mine-sweeper *Lingfield*, and did valuable work in keeping touch with the force, giving assistance by towing, and otherwise helping small craft in trouble while on the passage to and from Zeebrugge, also in receiving the surplus crews from blockships, and escorting motor launches. This veteran officer has been on patrol work off the south-east coast of England during the whole of the war. His energy and example are great incentives to the officers and men of the Trawler Patrol which he commands.

XIV.—Medical Arrangements.

123. In conclusion I desire to make a special reference to the praiseworthy manner in which the medical officers and their staff, and volunteer helpers, devoted their skill and sympathy to those who were wounded in these operations. Fighting at such close quarters, the casualties

[1] Received the D.S.C.

were bound to be numerous, and the wounds likely to be severe. Staff Surgeon James McCutcheon,[1] M.B., was the senior medical officer of the force. In an able report that officer outlines the work of his staff, and the circumstances in which it was done, and I trust that the Lords Commissioners will agree with me in thinking that no branch of the naval service surpassed in zeal and ability the efforts of the medical branch to prove itself worthy of its profession, and of the occasion. I have selected with difficulty from a number of very deserving officers the names of three[2] to be representative recipients of such promotion as their Lordships may be able to award for these operations to the medical branch of the Royal Navy.

I have the honour to be,
Sir,
Your obedient Servant,
ROGER KEYES,
Vice-Admiral.

Enclosure.

PROCEEDINGS AT OSTEND. REPORT FROM COMMODORE, DUNKIRK.

Office of Commodore, Dunkirk,
April 30, 1918.

Sir,—

I have the honour to forward the following report on Operation Z.-O., carried out on the night of the 22nd-23rd April.

1. A brief preliminary report was 'phoned to Vice-Admiral, Dover Patrol, on the 23rd April, since which

[1] Promoted to Fleet Surgeon, R.N.

[2] Surg. Frank P. Pocock, R.N. [D.S.O.]; Surg. William L. Clegg, R.N. [D.S.C.]; and Surg. H. St. C. Colson (promoted to Staff Surgeon).

photographs and air reconnaissances have established the facts (as reported) that—

(*a.*) *Sirius* and *Brilliant* are not inside Ostend Harbour, but lie stranded about 2,400 yards to eastward of eastern pier.

(*b.*) The Stroom Bank Buoy is not in its charted position, but is a little to eastward of the prolongation of eastern pier, approximately lat. 51 15 50 N., long. 2 53 20 E.

2. (*b*) accounts for (*a*); supposing, as is almost certain, that the buoy was in this position on the night of 22nd-23rd.

3. The location of *buoys* by aircraft is, of course, a very high art, and can only be done with any degree of accuracy with relation to closely surrounded land (or shoal) features.

Captain R. Graham, D.S.O., D.S.C., R.A.F., and Captain L. H. Slater, D.S.C., R.A.F., obtained the present position of Stroom Bank Buoy by coming down to 100 feet and fixing the buoy with reference, for direction, to the line of eastern pier.

4. The organisation detailed in my 0/53, of the 21st April, was carried out for Ostend operation, which I conducted with the assistance of Commander J. L. C. Clark, D.S.O., R.N., from on board *Faulknor*, leader of the Off-Shore Destroyer Force.

5. The operation was carried out according to programme. There were no hitches, the times were kept precisely, and I have complimented the senior officers of units, and all, on the care with which they both studied and carried out my necessarily rather voluminous orders.

6. (*a.*) The wind, on starting out, was light north-westerly, and continued thus until about 10 minutes before *Sirius* and *Brilliant* arrived at Stroom Bank Buoy,

when it most unluckily shifted round to the south-westward, causing all the smoke to go wrong at the critical moment.

(*b.*) The M.L.s and C.M.B.s strove with resolution and good judgment to compete with this reverse, but all their efforts were overpowered by the enemy's smoke screen blown to seaward, while they themselves became subjected to a heavy, but happily ill-directed, gunfire.

7. The blockships made the Stroom Bank Buoy (which was alight and marked the whole time), but after that the adverse smoke prevented them seeing anything by which they might have retrieved the error of the buoy's position.

8. (*a.*) Since the Captains of the blockships, Commander A. E. Godsal, R.N., and Lieutenant-Commander H. N. M. Hardy, D S.O., R.N., will have made their full reports to you, I say little more, since, after what has been said, it is needless to remark that the failure to find the entrance was no fault of theirs; on the contrary, the newly discovered position of the buoy only too plainly shows that their course, after rounding the buoy, *ought* to have brought them right in.

(*b.*) I may add that on my return to harbour about six hours later, the bitter disappointment of these two gallant officers showed itself chiefly in begging for another blockship apiece to have another try.

9. The low clouds and drizzle put all aircraft participation out of the question.

10. The monitor and siege gun bombardments were undoubtedly useful as a blind, and to keep the fire of the shore batteries down.

The shore batteries commenced to return the monitors' fire about 5 minutes after the latter opened. A number of shell fragments were picked up on board the monitors,

but there were no hits. Photographs show a number of hits around the German batteries, but none on the guns.

11. (*a.*) This time the enemy took longer to be alarmed than on the night of 11th/12th.[1] He seemed to take but a desultory interest until the monitors opened fire, *i.e.*, ¼ hour after the C.M.B.s arrived at the Stroom Bank Buoy, and, as on the previous occasion, he cannot have had a single patrol out.

(*b.*) Very few shells fell near us in the offshore destroyers. Enemy's fire was evidently either directed against the inshore boats, at the monitors, or barrage fire into the smoke areas.

(*c.*) His star shell, as before, averaged about 7,000 yards from the shore; when we closed to that range they dropped alongside of (one *on*) the division.

(*d.*) At intervals the enemy's star shell showed up to us the M.L.s busily engaged with their smoke screens, and at 11.50 also the blockships with their escort to the E.N.E. steering for the Stroom Bank Buoy. It was at this moment that we noticed the shift of wind to south-westward.

(*e.*) About 10 minutes later the blockships disappeared abreast the buoy into the smoke, and we saw no more of them, but picked up *Tempest* and *Tetrarch*.

(*f.*) C.M.B.s 12 and 19 report a "M.L. blew up" about 00.15, E.S.E., 2 miles from Stroom Bank Buoy; this apparently refers to the blockships being hit by shell.

(*g.*) About 00.25 bursts of firing became more frequent, and more searchlights switched on than before, evidently the result of the blockships' emergence from smoke and stranding.

(*h.*) After this there was little more than desultory

[1] See p. 29, *supra*.

firing, probably at monitors, with the exception of two 3-minute bursts of barrage fire at 00.42–00.52.

The searchlights continued searching actively until about 01.30 when their numbers reduced to three or four.

(*i.*) At 01.00 the 'retirement' red rocket signals and siren 'K's' were made by destroyers; this produced a few big shrapnel in our neighbourhood.

(*j.*) A few C.M.B.s and M.L.s were seen coming away off and on up to 2 a.m., when we withdrew to fix position by R, R.M.C. Buoy, picking up No. 7 C.M.B., disabled, on the way. (*Tetrarch* towed her home.)

(*k.*) Having fixed by Position R, we continued to cruise between R and Stroom Bank Buoy until daylight, and the shore became visible, when, nothing floating being in sight, all forces were withdrawn; B.C. Patrol being sent out later, and picking up the last straggler, viz., C.M.B. 17, who had run out of petrol near 3 B.C. Buoy.

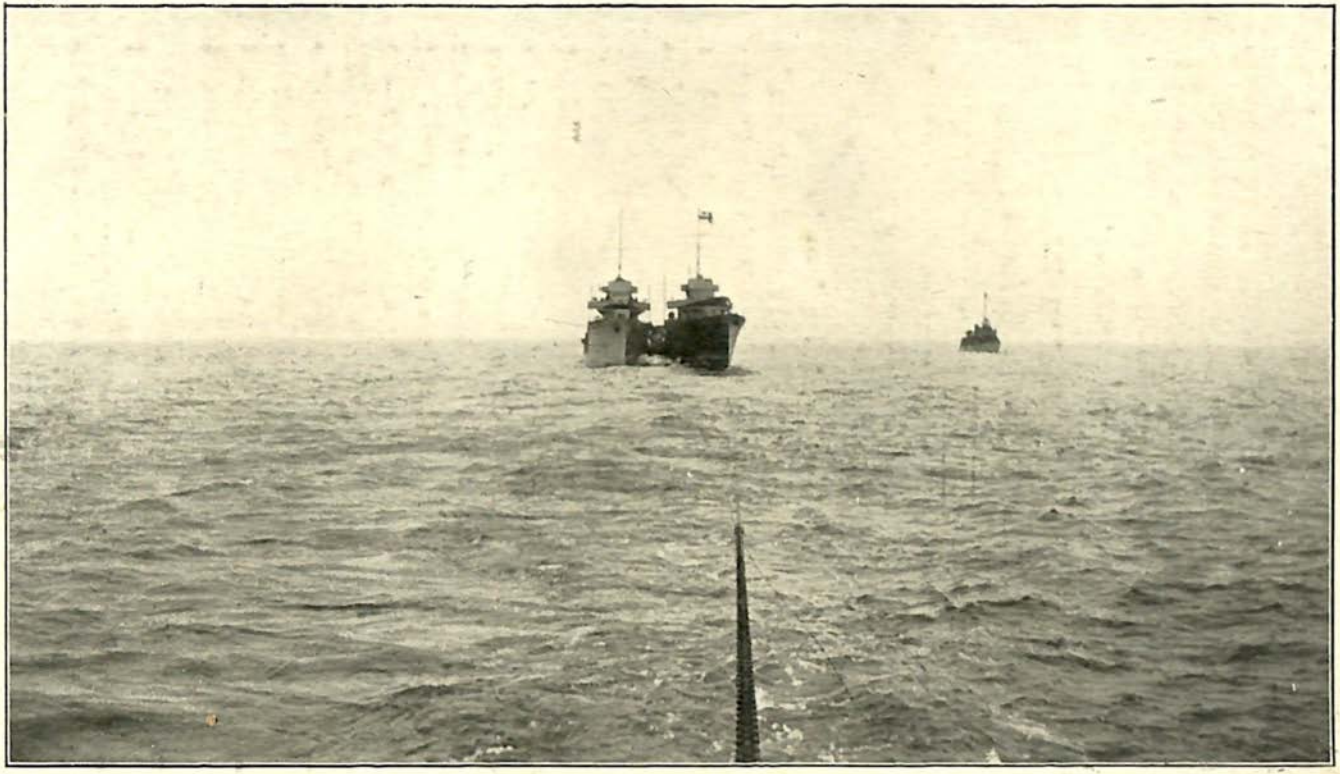
(*l.*) At 03.20, when near Stroom Bank Buoy, we saw two searchlights, judged about 500 yards apart, concentrated on something burning in the water between them.

At 03.30 this fire culminated in an explosion, and darkness ensued. The two searchlights switched out a few minutes later.

(*m.*) No enemy craft were seen by anyone, except that C.M.B. 12 feels sure that she was chased by a destroyer with searchlights. But I cannot think a craft coming out of Ostend could have been seen by no one else or escaped us, for, apart from the star-shell illumination, the diffused moonlight gave quite one mile visibility.

12. On return to harbour about 07.30, I found that:—

(*a.*) All the crews of the blockships had been saved, the majority by M.L.s 276, 283, and brought to Dunkirk; the few others who had evacuated in a pulling boat were picked up by the Gap Patrol.



H.M.S. *WARWICK* with H.M.S. *VELOX* lashed alongside, towed by H.M.S. *WHIRLWIND*, 4.30 a.m., May 10

(*b.*) This salvage work of M.L.s 276 and 283 was carried out under heavy, but fortunately not accurate, fire with a courage and coolness that alone could have achieved its wonderful result, for not a man was wounded, and the heavily laden boats returned to harbour safely.

(*c.*) All the M.L.s had returned intact with very slight casualties, and one damaged bow.

(*d.*) The C.M.B.s, too, both for Zeebrugge and Ostend, had all returned safely, either to Dunkirk or Dover, with the exception of two or three which were retrieved later. Their personnel casualties were two dangerously wounded and four wounded; considering the work done, a marvellous result, and one which reflects the greatest credit on the C.M.B. officers.

13. *Conclusions.*—(*a.*) The luck of the wind changing, combined with the shifting of the Stroom Bank Buoy, accounts for the failure to block Ostend Harbour. There is no discredit to anyone; indeed, none could have carried out their duties more admirably than did the Ostend forces on this occasion.

(*b.*) I anticipate success in the new endeavour, the undertaking of which has only been waiting favourable weather conditions during the last few days.

(*c.*) The lion's share of the work was, of course, done by the C.M.B.s, M.L.s, and blockships.

I have, &c.,

HUBERT LYNES,

Commodore, Dunkirk.

Vice-Admiral Sir Roger Keyes, K.C.B.,
C.M.G., M.V.O., D.S.O., R.N.,
Dover.

V

VICE-ADMIRAL SIR ROGER KEYES'S DISPATCH, JUNE 15, 1918[1]

Fleet House,
Dover,
June 15, 1918.

SIR,

Be pleased to lay before the Lords Commissioners of the Admiralty the following report on the renewed attempt made in the early morning of the 10th May, 1918, to block the entrance of the Ostend-Bruges Canal by sinking the *Vindictive* therein.

2. When I learnt on the 23rd April that the attempt to block Ostend had not succeeded, I represented to their Lordships the desirability of repeating the operation at once. The *Vindictive*, the only vessel available at the moment, being placed at my disposal, every effort was made to repair the damage she had suffered and fit her out before the expiration of the period in which the tide and darkness suited, *i. e.* about four days.[2] This was accomplished at Dover, thanks to the strenuous efforts of Rear-Admiral C. F. Dampier, the Superintendent of the Dockyard, and his small staff; the services of Engineer Commander Henry F. Bell, R.N., and Mr. A. J. Luke being particularly valuable.

[1] Published in the *London Gazette* 'Supplement', No. 31189, of February 19, 1919.

[2] The coincidence of high tide and darkness at Ostend terminated on c. April 27. See Commodore Lynes's Report *infra*, para. 9, 11.

Two hundred tons of cement were put into the *Vindictive's* after magazines and upper bunkers on both sides, which was all her draught would permit her to carry, in view of the depth of water in the approaches to Ostend Harbour.

Major-General Sir William Hickey, K.C.B., Commanding Dover Garrison, most helpfully provided men for filling bags with cement and putting them on board.

3. As already reported in my last dispatch,[1] Commander Alfred E. Godsal, R.N., and Lieutenant-Commander Henry N. M. Hardy, D.S.O., R.N., of the *Brilliant* and *Sirius* respectively, had begged to be allowed to make another attempt, and had reported that all their officers and Petty Officer Joseph J. Reed of the *Brilliant* had volunteered for this service. As Commander Godsal had led the previous attack, he was given command of the *Vindictive*, and Lieutenant Victor A. C. Crutchley, R.N.,[2] Sub-Lieutenant Angus H. Maclachlan, R.N., and Petty Officer Joseph J. Reed,[3] all of the *Brilliant*, accompanied him. Engineer Commander William A. Bury, R.N.,[4] however, claimed his right to remain in the *Vindictive*. This very gallant officer, who greatly distinguished himself on the 23rd April, represented that his knowledge of the engines and boilers of his ship should be utilized. He further begged that Engine-room Artificers Herbert Cavanagh,[5] Norman Carroll,[5] Alan Thomas,[6] and Herbert Alfred Harris,[5] who also volunteered, might be allowed to remain with him. I acceded to his request.

Lieutenant Sir John Alleyne, D.S.C., R.N.,[4] of H.M.S. *Lord Clive*,[7] who had been most useful in fitting up

[1] Of May 9, *suprà*, p. 111.
[2] Received the V.C.
[3] Received the C.G.M.
[4] Received the D.S.O.
[5] Received a bar to the D.S.M.
[6] Prisoner of War.
[7] Monitor.

the navigational arrangements which were destroyed on the 23rd April, asked to be allowed to navigate the vessel during the operation. I approved of this request, feeling that this officer's experience and intimate knowledge of the shoals and currents on the Belgian coast would be of great value to the Commander of the *Vindictive*.

The crew were selected from a very large number of volunteers from vessels of the Dover Patrol.

4. The *Vindictive* was in all respects ready by the desired date, but the weather was unfavourable, and the operation had to be postponed until the necessary condition of tide and darkness recurred. This delay made it possible to prepare a second ship, the old cruiser *Sappho*,[1] which was taken from Southampton to Chatham and fitted out by Chatham Dockyard with the greatest celerity and thoroughness.

5. Lieutenant-Commander Hardy took command of her, and he was accompanied by all the officers of the *Sirius*, Lieutenant Edward L. Berthon, D.S.C., R.N., Sub-Lieutenant Alfred V. Knight, R.N.R., and Engineer Lieutenant William R. McLaren, R.N. Her crew were selected from a very large number of volunteers in the Royal Naval Barracks at Chatham.

6. Aerial observation on the 9th May showed that many torpedo and submarine craft were still shut up in Bruges, and proved that the effectiveness of the blocking of the Zeebrugge branch of the canal was maintained up to that date. Although the craft so shut up in Bruges have been unable to use the small waterways to Ostend, the latter port was still being used by enemy torpedo craft and submarines.

7. Other information, confirmed by aerial observation,

[1] Same Class as *Sirius* and *Brilliant*; completed 1893; displacing 3,400 tons.

also disclosed the fact that to counterbalance the forced inactivity of the craft in Bruges, and probably to resist any repetition of the April attack, a considerable number of German destroyers had joined those units of the Flanders force which were outside the canal on the night of the 22nd–23rd of that month.

8. Commodore Hubert Lynes, C.M.G., at Dunkirk, having so ably carried out the direction of the former attempt as part of the Zeebrugge and Ostend scheme, I entrusted the conduct of the operations on this occasion to him, placing under his orders all the monitors, destroyers, motor launches, and coastal motor boats required, in addition to the blocking ships, *Vindictive* and *Sappho*. On the evening of the 9th May, the weather conditions being most promising,[1] the *Vindictive* and *Sappho* sailed in company[2] to join Commodore Lynes at Dunkirk.

His report, which is attached,[3] furnishes the details of the operation.

9. In order to prevent interference from Zeebrugge by the newly arrived enemy destroyer force mentioned in paragraph 7, H.M.S. *Warwick*, flying my flag, and a division of destroyers consisting of H.M. Ships *Whirlwind*, *Velox*, and *Trident*, under Captain Wilfred Tomkinson, R.N., cruised midway between Ostend and Zeebrugge.

10. Meanwhile the operation proceeded in accordance with the plan, except for the unfortunate breakdown of the *Sappho*, due to a boiler accident, which reduced her speed to such an extent that she was unable to reach her destination in time to take part. This halved the chances of success, and was a great misfortune.

[1] See the Press Bureau Narrative *supra*, p. 92, and Commodore Lynes's Report *infra*, para. 13.

[2] From Dover. See Commodore Lynes's Report *infra*, para. 11.

[3] *Infra*, p. 187.

With regard to the proceedings of *Vindictive*, I cannot do better than quote from the report of Lieutenant Victor Crutchley,[1] on whom the command devolved when Commander Godsal was killed and Lieutenant Sir John Alleyne seriously wounded:—

'On arrival at position "P", course was altered for the Stroom Bank Buoy.[2] The boat marking the buoy was seen and left close on the port hand; the buoy was not seen. Speed was reduced to twelve knots on passing the buoy.

'At this time the smoke screen was excellent. There was a lane between the eastern and western sections, and the only fire experienced was shrapnel, which I considered was fired at a venture, and did no harm. We ran on for thirteen minutes from the Stroom Bank Buoy, and then, as the entrance was not sighted, altered course to the westward parallel to the shore and reduced to 60 revolutions (nine knots). As we still failed to see the entrance we altered course 16 points to starboard, and returned along the shore to the eastward. We again failed to find the entrance, and so altered course 16 points to starboard. All this time, owing to *fog* and smoke, the visibility was not more than 1½ cables. This time the entrance was sighted about one cable on the port beam, and at the same time the ship came under a very heavy fire from shore batteries of all descriptions.

'On sighting the entrance, in accordance with previous orders, I passed the order "preparatory abandon ship" to the engine-room. As soon as the entrance was sighted the ship was handled from the conning tower. Commander Godsal immediately turned up for the entrance and ordered smoke to be lighted. At about this time communication with the after control failed. Just after the entrance was passed, Commander Godsal went outside the conning tower and gave the order "hard-a-starboard" from outside.

[1] Received the V.C.

[2] See Commodore Lynes's Report *infra*, para. 12.

'Immediately after this a heavy shell burst either on the conning tower or very close to it; Lieutenant Alleyne was knocked out, and Commander Godsal was not seen again, and all the occupants of the conning tower were badly shaken. I then ordered the port telegraph to full speed astern, to try to swing the ship across the channel. She grounded forward on the eastern pier when at an angle of about three points to the pier. As the ship stopped swinging, and at the time I considered that no more could be done, I ordered the ship to be abandoned.

'When the engine-room had been abandoned, Engineer Lieutenant-Commander Bury blew the ship up by firing the main charges and after auxiliary charges, and I endeavoured to fire the forward auxiliary charges. There was a considerable shock when the first set of charges were fired. I am not positive that the forward auxiliary charges fired, as I could not distinguish the shock from other disturbances.

'When I got on board M.L. 254,[1] I found that the First Lieutenant[2] had been killed by a shell bursting, also one deck-hand. The captain, Lieutenant Geoffrey H. Drummond, R.N.V.R., and the coxswain, had been wounded. We went out of the harbour stern first, followed the whole way by machine-gun fire. On finally going ahead the forecastle flooded, and the boat was very much down by the bows. The pump and buckets were got under way and all spare hands placed right aft. However, the water was gaining, and "S.O.S." was made by flashing lamp continually to seaward. The courses steered from Ostend were north for 15 minutes, and then west-by-north until picked up by *Warwick*.

'I cannot speak too highly of the bravery of the M.L.s coming alongside inside Ostend; they were under a continuous and heavy fire. M.L. 254 rescued two officers and thirty-seven men.

'The question of recommendations is a very diffi-

[1] Lieutenant Geoffrey H. Drummond, R.N.V.R., received the V.C.
[2] Lieutenant Gordon F. Ross, R.N.V.R.

cult one. Every man, without exception, behaved splendidly.'

11. It had been Commander Godsal's intention to ram the western pier with the object of swinging the ship across the channel under port helm, a manœuvre that would have been greatly assisted by the tide, which was setting strongly through the piers to the eastward. It would appear that when the *Vindictive* eventually found the entrance she was too close to the eastern pier to use port helm without risk of grounding broadside on. This would account for Commander Godsal's order 'hard-a-starboard' a few seconds before he was killed. The *Vindictive* was thus committed to starboard helm when the command developed on Lieutenant Crutchley, who very promptly put the port telegraph to full speed astern. Unfortunately the port propeller, which was very severely damaged against Zeebrugge Mole, was of little value. Due to this, and also to the fact that the tide was setting strongly against her starboard side, the ship's stern did not swing across the channel as desired, with the result that she grounded at an angle of about 25 degrees to the eastern pier, leaving a considerable channel between her stern and the western pier.

12. At 2.45 a.m., fifteen minutes after the programme time for the withdrawal of the motor craft, the *Warwick* and her consorts proceeded slowly to the westward parallel to the coast.

13. At 3.15 a.m. a signal of distress was observed from the direction of Ostend. I directed the division to close, and found M.L. 254 (Lieutenant Geoffrey H. Drummond,[1] R.N.V.R.) badly damaged and in a sinking condition, with two officers and thirty-seven men of the *Vindictive's* crew on board. Lieutenant Drummond

[1] Received the V.C.

was very severely wounded, his second in command, Lieutenant Gordon F. Ross, R.N.V.R., and other men killed, and most of her small crew and many of the *Vindictive's*, including her gallant Engineer Commander,[1] were wounded. They were transferred to the *Warwick*, and this took half an hour to do, on account of the serious condition of some of the wounded.

14. Dawn was now breaking, and H.M.S. *Warwick* and her consorts were within close range of the enemy's batteries. M.L. 254 was too badly damaged forward to allow of her being towed, and was rapidly settling down. I ordered her to be destroyed, and, as soon as this had been carried out, withdrew the division at 25 knots.

15. By this time the tide had fallen so low that it was inexpedient to return by the route inside of the shoals by which the approach had been made, and a course was steered for a gap in the net defence by the deep-draught route from Ostend to seaward.

It would seem that the enemy had mined this route in anticipation of an attack. At 4.0 a.m. H.M.S. *Warwick* struck a mine, which broke her back just before the superstructure of the after superimposed 4-inch gun, and destroyed the after part of the ship. She took a heavy list and appeared to be settling by the stern. H.M.S. *Velox* was ordered alongside H.M.S. *Warwick*, and the wounded, of whom there were a large number on board, were transferred to the former. H.M.S. *Whirlwind* then took H.M.S. *Warwick* in tow, and the latter being unable to steer, H.M.S. *Velox* was kept alongside while navigating the channels through the shoals to the open sea.

I arrived at Dover in H.M.S. *Warwick* at 4.30 p.m.

16. I have again to refer to the fine work done by the motor launches and coastal motor boats, as reported in para-

[1] Engineer Commander W. A. Bury.

graph 29 of the Commodore's letter. Their conduct in the late operation confirms the opinion I expressed of them in my dispatch on the previous operations.

17. The co-operation of the Air Force, under Brigadier-General Charles L. Lambe, C.M.G., D.S.O., R.A.F., was of great value during the operation. In spite of the fog the 214th Squadron (Squadron-Commander Herbert G. Brackley, D.S.O., D.S.C.) continued to attack in accordance with the programme until after the completion of the operation.

18. I greatly regret the loss of so fine an officer as Commander Godsal. His zeal to retrieve the failure of the *Brilliant* on the 23rd April impelled him to disregard all protection in order to secure success on this occasion.

19. As on the 22nd–23rd April, I am much indebted to Vice-Admiral Pierre Alexis M. A. Ronarc'h, Commandant Supérieur de la Marine dans la zone des Armées du Nord, Dunkerque, who placed at my disposal all the available vessels under his command, and assisted me in every possible way. The French torpedo craft and M.L.s performed valuable service in connection with the monitor bombardment.

20. I commend Commodore Hubert Lynes to their Lordships' favourable consideration.

The officers and men mentioned by him are being included in my list of recommendations, which will be forwarded as soon as possible.[1]

I have the honour to be,
Sir,
Your obedient Servant,
ROGER KEYES,
Vice-Admiral, Dover Patrol.

The Secretary of the Admiralty.

[1] See *infra*, p. 200.

Enclosure

Office of Commodore,
Dunkirk,
15th May, 1918.

SIR,

I have the honour to forward the following report on the operations for blocking Ostend Harbour, carried out on the night of 9th–10th May, 1918.

2. It will be remembered that on the night of the 22nd–23rd April, when the forces under your command so successfully achieved the blocking of the Zeebrugge-Bruges Canal, the Western Squadron, under my command, was unsuccessful in its attack, simultaneously delivered and with the same object, on Ostend.

3. The failure on that occasion was due, firstly, to the adverse shift of wind that blew all our smoke screens across the harbour entrance at the critical moment, and, secondly, to the displacement—whether by design or chance on the enemy's part—of the Ostend Buoy, whose normal position had formed a convenient departure point for the blockships.

4. Our lack of success was the fortune of war, not the fault of any one concerned; indeed, no one could have carried out their duties more admirably than did the Ostend forces that night, and I am deeply grateful that, in recognition of this fact, you were so considerate as to place the organization and leadership of another attack in my hands.

5. In the first operation the blockships had advanced under cover of a smoke screen, guided by the lights and signals made by the small craft (C.M.B.s and M.L.s) working close inshore. I decided to adopt in general a similar plan for the new attack, but previous experience,

and the necessity for assuming that the enemy would make counter-preparations against an exactly similar attack, called for modification in detail.

6. In preparing for the new attack, particular attention was paid to perfecting the navigational arrangements; numerous small, but important, improvements were introduced into the smoke gear, and the alternatives for guiding the blockships into the entrance were made so numerous as to reduce chance of failure, in that respect, to the smallest possible dimensions.

7. The quicker the delivery of the new attack, the greater the element of surprise and, consequently, of success. Realizing this, special efforts were made both at Dover and Dunkirk, so that within a few days of the first attack, *Vindictive* had been prepared for her new rôle of blockship, all the small craft had been completed with their smoke-lights and other fittings, and reorganized according to the new plan of attack, which had been promulgated to all concerned.

The alternative plans of attack, 'V.O.' and 'V.S.', were submitted to you in my operation orders 0/54 and 0/58 respectively.

8. For this rapid and satisfactory work of preparation at Dover, I beg particularly to offer my grateful thanks to Commodore the Hon. A. D. E. H. Boyle, C.B., M.V.O., Chief of the Staff, who left no stone unturned to have all my numerous requests carried out; for that at Dunkirk I am chiefly indebted to the energy of Commander J. L. C. Clark, D.S.O., R.N., my Second-in-Command; to Lieutenant-Commander F. H. Sandford, D.S.O., R.N., the staff officer you were good enough to lend me, who was mainly responsible for the smoke screen organization; and to Lieutenant H. F. Witherby, R.N.V.R., my Staff Intelligence Officer, whose knowledge of the enemy's

coast and close association with the air reconnaissance work of the 61st (Naval) Wing were invaluable.

9. The elements were, however, against us—for despite all these preparations, strong northerly winds, with rough seas, precluded all possibility of the enterprise up to a period when the conjunction of darkness and tide, in its turn, demanded postponement until the second week of the present month.

10. This enforced period of inaction was occupied in perfecting and testing the arrangements, and, above all, in the preparation of a second blockship,[1] which, on your representation, was ordered to be prepared and fitted out by His Majesty's Dockyard, Chatham.

11. The conjunction of darkness and tide made the night of 9th–10th May the first favourable night of the new period. By good fortune the weather conditions on the 9th gave every indication of promise, and accordingly on the afternoon of the 9th the operations were put in progress, firstly by the passage of *Sappho* to Dover, and later by the passage of both blockships, with their supporting and escorting forces, from Dover to Dunkirk. It was at first doubtful whether *Sappho* could be completed in time, but Chatham Dockyard made great efforts, and *Sappho* arrived at Dover with several hours in hand.

12. For days preceding the operation, rain, cloud, and mist had prevented more than the scantiest air reconnaissances, but towards sunset on the 9th, *i.e.* when the blockships were already steaming eastwards, an air reconnaissance announced that all the buoys off Ostend had apparently been removed. At considerable risk of having to land after dark, Squadron-Commander Ronald Graham, D.S.O., D.S.C., himself at once went out, returned safely, and confirmed the report.

[1] H.M.S. *Sappho*. See note, p. 180, *supra*.

This new move on the enemy's part had to be countered; we accordingly arranged to lay a special (calcic-phosphide) light-buoy of our own, which subsequently made a satisfactory departure point for the blockship and smoke screens.

13. The weather conditions as night advanced continued excellent, wind N. by W., sky clear, atmosphere good, both for air work and navigation, sea smooth enough for the small craft to operate, barometer steady, and conditions likely to remain stable.

14. *Vindictive* and *Sappho* arrived in Dunkirk Roads in good time, disembarked their surplus crews, and then proceeded with their escorts at the appointed time in the programme. *Sappho*, however, had scarcely left the anchorage than a man-hole joint in the side of her boiler blew out, reducing her speed to about six knots, and therefore putting her participation that night out of the question.

15. This very serious reduction of blocking material required consideration whether or no it was advisable to proceed with the operation.

I decided to continue with *Vindictive* and signalled to Commander Godsal that I had every confidence he would do his best without *Sappho*. I also informed you by W/T of my decision.

16. This done, I proceeded on board *Faulknor* (Commander Henry G. L. Oliphant, M.V.O., D.S.O.), leader of the offshore supports, to overtake the other forces, who, in accordance with orders, were already well on their way to their various stations. Commander Clarke and Lieutenant-Commander Sandford accompanied me in *Faulknor* to carry out staff work, and were of great assistance to me in conducting the operations.

17. After the sudden removal of the buoys, and in the

knowledge that nine enemy destroyers had been seen in the offing late that evening, I had fully expected enemy interference with our plan before reaching the place off Ostend where we should lay our buoy and spread the small craft. But no, nothing occurred. The enemy star shells and 'flaming onions' fired intermittently from the coast during the approach were evidently only part of his new searching routine. Once again his preparations against surprise included no. patrol craft in the offing.

By 1.30 a.m. all preliminary dispositions had been completed, and the (advanced) inshore forces, *i. e.* the C.M.B. and M.L. divisions, sent in to carry out their various duties.

18. One new feature of the present plan was that there should be no *preliminary* bombardments or air raid; we were to make no attacks until our sea forces were discovered by the enemy.

19. At 1.35 a.m. there was still no firing from the shore, but a searchlight lit up, and commenced to search. The C.M.B.s had arrived, and were running their smoke screens. The noise of their engines, and those of the M.L.s approaching on their heels, was, of course, carried ashore by the breeze.

At 1.43 a.m. I gave the prearranged signal to 'open fire', which was immediately responded to by the monitors, siege guns, and the air squadrons. Bombs and shells, whose bursts could be seen over the top of our smoke screen, were undoubtedly giving the enemy a warm time, and constituting a protection to the small craft inshore.

20. Shortly before this I had noticed with some anxiety the gathering of light-drifting 'clouds'. But good-sized gaps, through which stars shone, could be seen at

1.45 a.m., when the sky became completely overcast, and five minutes later we were enveloped in a thick sea-fog which, for the next all-important hour, reduced our means of keeping in touch with events to sound alone.

21. I felt that we could hope for no more air or monitor bombardments, and that thus deprived of their valuable support, the small craft inshore would suffer in proportion, but fortunately this was not the case. The fog proves to have been merely a local patch, not extending to the monitors to the westward, and was also sufficiently low-lying to enable the airmen to continue their attacks between it and the true cloud system at some 10,000 feet altitude.

To realize these conditions, and the darkness due to absence of moon, and to know that the Royal Air Force carried out its whole programme is, in itself, a very high tribute to the efficiency of the air squadrons, who, under the orders of Brigadier-General Charles L. Lambe, C.M.G., D.S.O., took part in the operations. All our aeroplanes eventually returned to their aerodromes; some landed well to the westward, naturally under difficulties; one crashed so badly that the pilots were both severely injured.

The monitors, too, did good and useful work—particularly *Prince Eugene*. Captain Ernest Wigram, D.S.O.,[1] led his division well inside range limits, in order that guns of the secondary armament might play a part as well as the big guns. This they did with good effect, and it is really rather wonderful that his division escaped without injury, for his front rank position put him inside the enemy's long-ranged star shells, and brought his division under a heavy fire from the shore batteries.

[1] Received the C.M.G.

The R.M.A. siege guns, under Colonel Pryce Peacock, also maintained a valuable fire on the enemy's heavy coast batteries throughout the operation.

22. To return to Ostend. 2 a.m., *i.e. Vindictive's* programme time to arrive at the piers, was signalled by a heavy cannonade of quick-firers and machine-gun fire near the entrance. The enemy had now almost certainly realized the nature of the attack, and since the smoke screens and fog prevented him aiming at definite objectives, except when the small craft ran close alongside to fire torpedoes at, or engage, the pier-heads with their machine-guns, he concentrated his effort in a continuous barrage fire across the entrance from the whole of the exceedingly formidable array of batteries in the neighbourhood of Ostend.

23. For the next twenty minutes, the critical period during which *Vindictive* must succeed or fail, the offshore destroyer forces were ordered to fire star shell over the entrance, and shell at the enemy's batteries—the former to light up the pier-heads for *Vindictive*, and the latter to divert the enemy's attention further seaward. This firing was useful; the inshore forces were encouraged by having audible proof of our support close behind them, and the enemy diverted a small proportion of his fire. Very few shells came near us, however, either at this time or later; there were no casualties either to material or personnel among the offshore forces. I attribute this mainly to the fog and smoke screens.

24. Meanwhile, *Vindictive*, after passing our calcic-phosphide buoy,[1] had arrived 'on time' at where she expected to find the entrance. The fog, and apparently also some of the smoke borne on an easterly draught of air (the

[1] According to the Press Bureau Narrative she passed it four minutes before the signal 'open fire' was made, *i.e.* at 1.39 a.m.

result of wind impinging on the tall houses on the sea-front), had reduced the seashore visibility to two or three hundred yards at the most, and nothing could be seen.

Vindictive accordingly reduced speed, turned about, and searched to the westward. Still finding nothing, she again turned about, steered slowly eastward, and gave the 'last resort' signal to her C.M.B. escort. This signal was obeyed by lighting a million candle-power flare close inshore to the westward of the entrance. In most circumstances, the illumination of the whole sea-front by this intensely brilliant flare would probably have brought very heavy casualties to the inshore craft and *Vindictive* herself, through placing them under accurate gunfire, but on this occasion the fog, hitherto our enemy, now proved our friend, for while the flare showed *Vindictive* the piers, the small craft still remained ill-defined or invisible, except at closest range.

25. *Vindictive* now became clearly visible to the enemy's batteries, who concentrated all efforts on her. But she had only two hundred yards to go, and Commander Godsal immediately turned up for the entrance.

Communication between the conning-tower and the after control soon failed, and, the entrance being passed, Commander Godsal went outside the conning-tower and gave the necessary orders for placing the ship in her blocking position.

At this moment a very heavy shell burst, either on the conning-tower or close to it. This must have killed Commander Godsal, for he was seen no more; and later, after the ship had been sunk in the channel, careful search failed to reveal his body.

This very gallant officer must have known before being killed that his efforts were crowned with success.

Lieutenant Sir John Alleyne[1] was knocked out, severely wounded in the stomach, and all the occupants of the conning tower were badly shaken by this shell. Lieutenant Victor Crutchley[2] then took command, and endeavoured to place the ship across the channel. The sinking charges were fired by Engineer Lieutenant-Commander William A. Bury[1] and preparations made to abandon ship.

26. All this time *Vindictive* was continuously fired at, both by heavy and machine guns, and repeatedly hit; the after control had been completely demolished, killing Sub-Lieutenant Angus Maclachlan and all with him, and the whole upper deck was a mass of débris.

Notwithstanding this, perfect order was maintained, and a careful search for wounded was made before embarking in the two M.L.s (Nos. 254 and 276), who had run in through the fire zone to effect the rescue.

27. Motor Launch 254 (Lieutenant Geoffrey H. Drummond, R.N.V.R.[2]), coming alongside *Vindictive's* inshore side, embarked Lieutenant Crutchley, Engineer Lieutenant-Commander Bury, and thirty-seven men. With his First Lieutenant (Lieutenant Gordon Ross, R.N.V.R.) and Deckhand J. Thomas killed, his coxswain wounded, and himself wounded in three places, Lieutenant Drummond backed his now heavily laden motor launch out of the harbour, still under a tremendous fire, cleared the entrance, and made straight to seaward.

Arriving outside the fire zone, Lieutenant Drummond found his launch gradually filling forward from her injuries. Standing on at slow speed through the fog, and contriving somehow or other to pass close to the offshore destroyers without either getting in touch, M.L. 254 was most fortunately picked up in a sinking condition about forty minutes after leaving Ostend by

[1] Received the D.S.O. [2] Received the V.C.

your flagship *Warwick*.[1] Rescuers and rescued were quickly taken on board and M.L. 254 then sank.

28. M.L. 276 (Lieutenant Roland Bourke, R.N.V.R.[2]), having followed *Vindictive* into Ostend (engaging both piers with his machine-guns *en route*), went alongside *Vindictive* after M.L. 254, with her first-rescued party, had shoved off.

After much search and shouting, and still under a very heavy fire, Lieutenant Bourke and Sub-Lieutenant Petrie[3] managed to find and embark the last three of *Vindictive's* survivors (Lieutenant Alleyne and two ratings), all badly wounded, in the water clinging to a capsized skiff.

This fine rescue effected, M.L. 276, hit in fifty-five places and with three of her crew killed or wounded, cleared the harbour, and was able to continue steering to the westward until picked up and taken in tow by *Prince Eugene*.[4]

29. The small inshore craft—C.M.B.s under Lieutenant Arthur E. P. Welman, D.S.C., R.N.,[5] and Lieutenant Francis C. Harrison, D.S.O., R.N., and the M.L.s under Commander Ion Hamilton Benn, D.S.O., R.N.V.R.,[6] as before,[7] carried out all their duties splendidly; to them must be given the chief honour of having guided *Vindictive* in.

Daring exploits of these small craft, all contributory to the general success, are numerous; they are recounted by the senior officers of divisions in their detailed reports, but I would specially mention the following:

C.M.B. No. 25 (Lieutenant Russell H. McBean, R.N.[8]) escorted *Vindictive* with smoke screen close up to the

[1] See *supra*, p. 184.
[2] Received the V.C.
[3] Received the D.S.C.
[4] Monitor.
[5] Received bar to the D.S.O.
[6] Received the C.B.
[7] *i.e.* as on April 22–23.
[8] Received the D.S.C.

entrance, where she assisted her with guiding lights, then torpedoed the piers, and finally engaged the machine-guns there with his own machine-guns with apparently good effect, during which Lieutenant McBean was wounded and Acting Chief Motor Mechanic G. E. Keel killed. Having seen *Vindictive* inside the piers, and her work being completed, Sub-Lieutenant George R. Shaw, R.N.R.[1] (second in command), brought her safely back to harbour, Motor Mechanic A. J. Davis[2] filling Chief Motor Mechanic Keel's place, and keeping the engines running most efficiently.

C.M.B. No. 24 (Lieutenant Archibald Dayrell-Reed, D.S.O., R.N.R.[3]) and C.M.B. No. 30 (Lieutenant Albert L. Poland, R.N.[1]) both carried out successful torpedo attacks on the pier ends, afterwards laying and maintaining good smoke screens close inshore, throughout the remainder of the operation.

C.M.B. No. 26 (Lieutenant Cuthbert F. B. Bowlby, R.N.[4]) escorted *Vindictive* close up to the entrance, then ran ahead, and finding one of the piers, fired his torpedo at it. The water being shallow, and range short, the explosion shook the boat so severely as to damage her engines and open her seams. She commenced to sink, but by his presence of mind, and the cool perseverance of Chief Motor Mechanic E. W. McCracken,[2] Lieutenant Bowlby got the leak stopped, engines going again, and brought his boat out of the fire zone, where Commander Bertram H. Ramsay, leader of one of the offshore divisions, took her in tow.

C.M.B. No. 22 (Lieutenant William H. Bremner, R.N.,[1] with Lieutenant Arthur E. P. Welman, D.S.O., D.S.C.,[3] Senior Officer of C.M.B.s, aboard), when carrying out her

[1] Received the D.S.C.
[2] Received the D.S.M.
[3] Received bar to D.S.O.
[4] Received bar to D.S.C.

smoke-screening of the shore batteries, encountered, close inshore, an enemy torpedo boat, who switched on her searchlight and opened fire. C.M.B. No. 22 had no better weapon than her Lewis guns, but with these she attacked and peppered the torpedo boat to such good effect as to drive her away from the harbour entrance, and prevent her interfering with the blocking operation.

C.M.B. No. 23 (Lieutenant the Hon. Cecil E. R. Spencer[1]) escorted *Vindictive* close inshore, and kept touch with her until *Vindictive* gave the 'last resort' signal, on which C.M.B. No. 23 laid, and lit, the million candle-power flare by whose light *Vindictive* eventually found her way in.

30. To recount the foregoing exploits of the small craft is in no way to detract from the praise due to all, particularly to the senior officers of units, for the care and precision with which they carried out my necessarily rather elaborate orders.

31. The general retirement was well executed and without further casualties or incident, the supporting forces remaining out until daylight to pick up any disabled small craft who might still be out. There were none, however; those who were unable to return by their own power had already been towed home.

32. No interference by enemy craft was experienced throughout the operation, but from subsequent reports of some of the inshore craft it appears that several German torpedo boats were lying close under the shore batteries the whole time, and made no move to come out.

33. Our casualties were remarkably light—2 officers and 6 men killed, 5 officers and 25 men wounded, 2 officers and 9 men missing, believed killed. Our only loss in material is M.L. 254. A number of the small craft were considerably damaged by gunfire, but

[1] R.N. Received bar to D.S.C.

all these are, or will be shortly, ready for action again. The light casualty list must be attributed to the efficient smoke screens, and probably also to the fog.

34. Of the *Sappho*, I can but record the bitter disappointment of all aboard her at the accident that prevented her following *Vindictive*. One and all, they begged to be given another chance, and when the day comes for their request to be granted, I am sure they will not be found wanting.

I have, &c.,

HUBERT LYNES,
Commodore.

To Vice-Admiral
Sir Roger Keyes, K.C.B., C.V.O., D.S.O.

VI

VICE-ADMIRAL SIR ROGER KEYES'S DISPATCH,[1] JULY 24, 1918

Fleet House, Dover.
24th July, 1918.

SIR,

With reference to my despatch No. 2305/003 of 15th June, 1918, I have the honour to bring to the notice of the Lords Commissioners of the Admiralty the names of the following Officers and Men who performed distinguished service in the second blocking operation against Ostend on the night of 9th/10th May, 1918.

2.—Aerial photographs taken prior to the operation clearly showed that the enemy had made special preparations in anticipation of a renewed attack.

3.—The operation was carried out in mined waters in the face of a tremendous fire, and the greatest credit is due to those who so readily volunteered for hazardous service in the *Vindictive* and in motor launches detailed for rescue work, and to the crews of the numerous craft which covered and screened the approach of the *Vindictive*, led her to her objective, and rescued the survivors of her crew after she had been blown up between the piers of Ostend harbour.

[1] Published in the *London Gazette* 'Supplement', No. 30870, of August 28, 1918.

The following Officers, Petty Officers and Men performed specially distinguished service in action on the night of 9th/10th May, 1918:—

Capt. Hubert Lynes, C.B., C.M.G., R.N. (Cdre., 2nd Cl.).

Commodore Lynes at Dunkirk having so ably carried out the direction of the former attempt to block Ostend as part of the Zeebrugge and Ostend scheme on the night of 22nd/23rd April, I entrusted the conduct of the operation again to him. He directed it in a most able manner, proceeding himself in H.M.S. *Faulknor*, and supporting the *Vindictive* from an inshore position.

Cdr. Alfred E. Godsal, D.S.O., R.N.

This officer led the previous attempt to block Ostend in the *Brilliant*, and on his return at once begged to be allowed to try again. On being appointed to the *Vindictive* he worked with the greatest energy to get her ready for further service at the earliest possible moment. On the night of 9th/10th May, having placed his vessel between the piers of Ostend harbour, he left the shelter of the conning tower for the forecastle in order to get a better view for manœuvring her into the required position. He was almost immediately killed, and the Service lost in him a very gallant and valuable officer.

Lieut. Angus H. Maclachlan, R.N.

Lieutenant Maclachlan was in the *Brilliant* in the previous attempt to block Ostend, and at once volunteered for the second operation. This gallant young officer was in charge of the *Vindictive's* after control on the night of the 9th/10th May, and was killed at his post.

Lieut. Geoffrey H. Drummond, R.N.V.R.[1]

Volunteered for rescue work in command of M.L. 254. Following *Vindictive* to Ostend, when off the piers a shell burst on board, killing Lieutenant Gordon Ross and Deckhand J. Thomas, wounding the coxswain,[2] and also severely wounding Lieutenant Drummond in three places. Notwithstanding his

[1] Received the V.C.

[2] David George Rees, *infra*, p. 209.

wounds he remained on the bridge, navigated his vessel, which was already seriously damaged by shell fire, into Ostend harbour, placed her alongside *Vindictive*, and took off two officers and thirty-seven men—some of whom were killed and many wounded while embarking. When informed that there was no one alive left on board, he backed his vessel out clear of the piers before sinking exhausted from his wounds. When H.M.S. *Warwick* fell in with M.L. 254 off Ostend half an hour later the latter was in a sinking condition.[1] It was due to the indomitable courage of this very gallant officer that the majority of the crew of the *Vindictive* were rescued.

Lieut. Roland Bourke, D.S.O., R.N.V.R.[2]

Volunteered for rescue work in command of M.L. 276, and followed *Vindictive* into Ostend, engaging the enemy's machine guns on both piers with Lewis guns. After M.L. 254 had backed out, Lieutenant Bourke laid his vessel alongside *Vindictive* to make further search. Finding no one he withdrew, but hearing cries in the water he again entered the harbour, and after a prolonged search eventually found Lieutenant Sir John Alleyne and two ratings, all badly wounded, in the water, clinging to an upended skiff, and rescued them. During all this time the motor launch was under a very heavy fire at close range, being hit in fifty-five places, once by a 6 in. shell—two of her small crew being killed and others wounded. The vessel was seriously damaged and speed greatly reduced. Lieutenant Bourke, however, managed to bring her out and carry on until he fell in with a Monitor, which took him in tow. This episode displayed daring and skill of a very high order, and Lieutenant Bourke's bravery and perseverance undoubtedly saved the lives of Lieutenant Alleyne and two of the *Vindictive's* crew.

Lieut. Victor A. C. Crutchley, D.S.C., R.N.[2]

This officer was in *Brilliant* in the unsuccessful attempt to block Ostend on the night of 22nd/23rd April, and at once volunteered for a further effort. He acted as 1st Lieut. of

[1] See the Dispatch of June 15, para. 13.

[2] Received the V.C.

Vindictive, and worked with untiring energy fitting out that ship for further service. On the night of 9th/10th May, after his commanding officer had been killed and the second in command severely wounded, Lieut. Crutchley took command of *Vindictive* and did his utmost by manœuvring the engines to place that ship in an effective position. He displayed great bravery both in the *Vindictive* and in M.L. 254, which rescued the crew after the charges had been blown and the former vessel sunk between the piers of Ostend harbour, and did not himself leave the *Vindictive* until he had made a thorough search with an electric torch for survivors under a very heavy fire. Lieut. Crutchley took command of M.L. 254 when the commanding officer sank exhausted from his wounds, the second in command[1] having been killed. The vessel was full of wounded and very seriously damaged by shell fire, the fore part being flooded. With indomitable energy and by dint of baling with buckets and shifting weight aft, Lieut. Crutchley and the unwounded kept her afloat, but the leaks could not be kept under, and she was in a sinking condition, with her forecastle nearly awash, when picked up by H.M.S. *Warwick*. The bearing of this very gallant officer and fine seaman throughout these operations off the Belgian coast was altogether admirable and an inspiring example to all thrown in contact with him.

Lieut. Sir John M. Alleyne, Bart., D.S.C., R.N.[2]

Volunteered from a Monitor[3] of the Dover Patrol for service in the *Vindictive*. He rendered valuable service in refitting navigational arrangements which were destroyed in *Vindictive* on 23rd April, and on the actual night of the operation was invaluable on account of his local knowledge. He showed great coolness under a very heavy fire, and most skilfully navigated the *Vindictive* to the entrance to Ostend harbour. He was severely wounded and rendered unconscious when his Captain[4] was killed.

[1] Lieutenant Gordon Ross.
[2] Received the D.S.O.
[3] *Lord Clive*. See Dispatch of June 15, para. 3.
[4] Commandor A. E. Godsal.

Eng. Cdr. William A. Bury, R.N.[1]

This gallant officer greatly distinguished himself in *Vindictive* on 23rd April, and as soon as he knew another operation was contemplated, volunteered, begging to be allowed to remain in charge of the engine room department of that vessel. He worked most energetically to fit her out for further service, and on the night of 9th/10th May he again rendered invaluable service, setting a fine example to his men. He remained in the engine room until the last possible moment, and when everyone was clear he blew the bottom out of the ship by firing the main and auxiliary after charges. He was very severely wounded.

Cdr. (act. Capt.) Ion Hamilton Benn, D.S.O., M.P., R.N.V.R.[2]

This officer led the motor launches in M.L. 105 with conspicuous ability and success. This is the third occasion Capt. Benn has led the inshore motor launch division off Ostend under a very heavy fire. Capt. Benn has set a very fine example of bravery and devotion to duty to the officers and men of the motor launches of the Dover Patrol, which he has commanded for nearly three years, and has thus contributed greatly to the success which has attended the gallant efforts of these small craft in carrying out the dangerous duties assigned to them during these operations off the Belgian coast.

Cdr. Reginald St. P. Parry, R.N.[1]

Commander Parry commanded a Destroyer, and handled his vessel with skill and decision, performing a most valuable service under difficult conditions.

Capt. Ernest Wigram, D.S.O., R.N.[3]

This officer was in command of H.M. Monitor *Prince Eugene*. He led his division well inside the allotted range in order to bring the secondary armament of the vessel into action. This brought the ships under a heavy fire from the shore batteries, and undoubtedly contributed considerably to the success of the operations.

[1] Received the D.S.O. [2] Received the C.B.
[3] Received the C.M.G.

Lieut. Arthur E. P. Welman, D.S.O., D.S.C., R.N.[1]

The part played by the Coastal Motor Boats during the operation was all-important. Lieut. Welman organised and led them in a coastal motor boat in a most spirited manner. He[2] encountered an enemy torpedo boat near the entrance to Ostend, which switched on searchlights and opened fire. He at once closed with her, and engaged her with Lewis guns to such good effect that she withdrew and left the channel clear for the approach of the blockships.

Lieut. (act. Lieut.-Cdr.) Keith R. Hoare, D.S.O., D.S.C., A.M., R.N.V.R.[1]

Volunteered for rescue work at Ostend in command of M.L. 283. He was ordered to follow astern and assist two other motor launches which were detailed for rescue work. He remained at the Stroom Bank Buoy position until *Vindictive* had passed and then followed her, patrolling east and west within a quarter of a mile of the shore under heavy pom-pom and machine-gun fire, searching for survivors until 3.20 a.m., when all hope of finding anyone had passed.

Cdr. William W. Watson, R.N.V.R.[3]

Was in command of M.L. 105, and was of the greatest assistance to Capt. Benn in arranging and supervising the smoke screen. This involved going from end to end of the line and taking his vessel close inshore several times, when he came under heavy barrage fire. He showed great courage and coolness throughout the operation.

Lieut.-Cdr. Raphael Saunders, R.N.V.R.[3]

This officer volunteered for rescue work at Ostend in command of M.L. 128. In company with M.L. 283 he went in after *Vindictive* to look for survivors. When near the shore he came under heavy fire—his signalman was killed and Lieut. Brayfield[4] and one of the crew wounded. This officer showed great coolness, setting a fine example to his men throughout,

[1] Received bar to D.S.O.

[2] In C.M.B. 22. See Lieut. W. H. Bremner, *infra*, p. 206.

[3] Received the D.S.O.

[4] See *infra*, p. 208.

and was of the greatest assistance in organising the smoke screen.

Lieut. Russell H. McBean, R.N.[1]

In command of a coastal motor boat [No. 25]. He escorted *Vindictive* close up to the entrance at Ostend, covering her with smoke screen and then assisting her with guiding lights. He torpedoed the eastern and western piers, and finally engaged the machine guns there with his own machine guns at point-blank range with apparently good effect. He most skilfully handled his vessel under a heavy fire until he was wounded.

Sub-Lieut. George R. Shaw, R.N.R.[1]

Second in command of a coastal motor boat [No. 25] which escorted *Vindictive* with smoke screen close up to the entrance of Ostend Harbour, assisting her with guiding lights. His vessel then torpedoed the eastern and western piers, and finally engaged the machine guns at point-blank range. During this engagement the commanding officer[2] was wounded and the chief motor mechanic killed. Having seen *Vindictive* inside the piers, and the work of his vessel completed, Sub-Lieut. Shaw brought her safely back to harbour.

Lieut. William H. Bremner, R.N.[1]

Was in command of a coastal motor boat [No. 22]. When carrying out his smoke screening of the enemy shore batteries, he encountered close inshore an enemy torpedo boat, which switched on her searchlight and opened fire. Lieut. Bremner had no better weapons than Lewis guns, but with these he attacked and peppered the torpedo boat to such good effect as to drive her away from the harbour entrance and prevent her interfering with the blocking operation.

Lieut. The Hon. Cecil E. R. Spencer, D.S.C., R.N.[3]

This officer was in command of a coastal motor boat [No. 23] and escorted *Vindictive* close inshore and kept touch with her until she gave the "last resort" signal, on which he laid and lit

[1] Received the D.S.C. [2] Lieutenant Russell H. McBean.
[3] Received bar to D.S.C.

the flare, which greatly assisted the operation, drawing heavy fire previously directed at the *Vindictive* on to himself.

Lieut. Rawsthorne Procter, R.N.V.R.[1]

This officer was in charge of a section of motor launches screening Monitors during the bombardment of the Ostend shore batteries. He exhibited conspicuous ability and initiative under heavy fire, and materially contributed to the success of the operation.

Lieut. Archibald Dayrell-Reed, D.S.O., R.N.R.[2]

Was in command of a coastal motor boat [No. 24], and carried out a successful attack on the pier ends, afterwards laying and maintaining good smoke screens close inshore throughout the remainder of the operation under a heavy fire.

Lieut.-Cdr. Jean L. Miéville, R.N.V.R.[3]

Was in command of M.L. 280 and leader of a smoke screen unit. He led his unit with skill and judgment in a very exposed position, and it was largely due to him that the screen was so extremely successful in his section.

Sub-Lieut. James Petrie, R.N.V.R.[1]

This officer volunteered for rescue work in M.L. 276. When the coxswain was killed near the Ostend piers, he jumped to the wheel and steered the launch into the harbour. When fired on by machine guns from the piers, he manned the Lewis gun and returned the fire on both pier-heads. Later, when three wounded men[4] were discovered in the water, he personally assisted them into the launch, being exposed all the time to heavy fire.

Lieut. Cuthbert F. B. Bowlby, D.S.C., R.N.[5]

In command of a coastal motor boat [No. 26], and escorted *Vindictive* close up to the entrance, then ran ahead, and finding one of the piers, fired a torpedo at it. The water being shallow and the range short, the explosion shook the boat so severely as

[1] Received the D.S.C.
[2] Received bar to D.S.O.
[3] Received the D.S.O.
[4] Lieutenant Sir John Alleyne and two ratings of *Vindictive*.
[5] Received bar to D.S.C.

to damage her engines and open her seams. She commenced to sink, but by his presence of mind he got the leak stopped, engines going again, and brought his boat out of the fire zone, where he was taken in tow by H.M.S. *Broke*.

Lieut. Albert L. Poland, R.N.[1]

In command of a coastal motor boat [No. 30], and carried out a successful torpedo attack on the pier ends, afterwards laying and maintaining good smoke screens close inshore throughout the remainder of the operation under a heavy fire.

Lieut. Anthony C. Mackie, R.N.V.R.[1]

This officer was of great assistance in command of M.L. 279. He pluckily carried on his smoke screen work under fire for one and a half hours after breaking the starboard shaft, retiring with the rest of the flotilla, when operations were completed, under one engine.

Lieut.-Cdr. Arthur G. Watts, R.N.V.R.[2]

This officer was in command of M.L. 239 and leader of a smoke screen unit. He led his unit with skill and judgment in a very exposed position, and it was largely due to him that the screen was so extremely successful in his section.

Lieut. Felix F. Brayfield, R.N.V.R.[1]

This officer volunteered for rescue work as second in command of M.L. 128. M.L. 128, in company with M.L. 283, went in after *Vindictive* to look for survivors. When near the shore she came under heavy fire, the signalman was killed and Lieut. Brayfield and one of the crew wounded. Lieut. Brayfield showed great devotion to duty, remaining on the bridge and carrying on with his duties until the operation was over, though wounded in the leg.

Lieut. Allan L. Geddes, R.N.V.R.[1]

This officer was in command of M.L. 553 and leader of an inshore smoke screen unit. He led his unit with skill and judgment under fire, and it was largely due to him that the smoke-screen was so extremely successful in his section.

[1] Received the D.S.C. [2] Received the D.S.O.

Lieut. Gordon F. Ross, R.N.V.R. (Killed in action.)

Volunteered for rescue work in M.L. 254—killed in the entrance to Ostend harbour.[1]

P.O. Joseph James Reed, D.S.M.[2]

This Petty Officer was in *Brilliant* in the previous attempt to block Ostend. He immediately volunteered to accompany his officers in a second operation. On the night of 9th/10th May he steered the *Vindictive* into Ostend harbour and, when the charges were fired and the ship abandoned, he picked up Lieut. Sir John Alleyne, who was lying unconscious in the conning tower, carried him to the gangway, and lowered him over the side. This very gallant Petty Officer then assisted others to escape, and on board M.L. 254 was of the greatest assistance in keeping that vessel afloat until she was picked up.

Ldg. Dkhnd. David George Rees, R.N.R.[2]

For his conspicuous gallantry as coxswain of M.L. 254, remaining at the wheel after being wounded. He assisted Lieut.-Cdr. Drummond—also seriously wounded—to put the motor-launch alongside *Vindictive* in Ostend harbour, and carried on until he was relieved by one of the rescued crew.

The following Engine-room Artificers distinguished themselves in the *Vindictive* during the attack on Zeebrugge Mole on 23rd April. They immediately volunteered for further service in *Vindictive*, and behaved with conspicuous bravery in that ship on the night of 9th/10th May:—

E.R.A., 3rd Cl., Herbert Cavanagh, D.S.M.[3]
Act. E.R.A., 4th Cl., Herbert Alfred Harris, D.S.M.[3]
E.R.A., 4th Cl., Norman Carroll, D.S.M.[3]
E.R.A., 4th Cl., Alan Thomas, D.S.M. (Prisoner of war.)

The following volunteered for a very hazardous service and distinguished themselves in the *Vindictive* on the

[1] See Lieutenant G. H. Drummond, *supra*, p. 201.
[2] Received the C.G.M.
[3] Received bar to D.S.M.

night of 9th/10th May. Lieut. Crutchley reports:[1] "I find it impossible to select any other names, as all behaved equally well."

Sig. David Heale.[2]
Ldg. Sea. Albert Westly Ling.[2]
Ldg. Sea. Ernest Edward Robertson.[2]
A.B. Henry Frederick George Wilson.[2]
A.B. Frank John Bore.[2]
A.B. John Chambers.[2]
A.B. Victor Vernon Surridge.[2]
E.R.A., 3rd Cl., Francis Joseph Pickerell.[2]
Sto. P.O. Samuel John Jordan.[2]
Sto. P.O. James Percy Newington.[2]
Ldg. Sto. Bernard Whirledge Lowe.[2]
Ldg. Sto. Albert Edward Saunders.[2]
Sto., 1st Cl., John Edward Taylor.[2]
Sto., 1st Cl., Frederick Gilroy.[2]
Sto., 2nd Cl., George William Kenneth Elliott.[2]
Sto., 1st Cl., William Carter.[2]
Sto., 1st Cl., William Joslin.[2]
Sto., 1st Cl., John Henry Statton.[2]
Sto., 2nd Cl., Frederick Charles Russell.[2]
Sto., 2nd Cl., Patrick O'Reilly.[2]
Sto. P.O. Charles McDonald. (Missing.)
Sto. P.O. George Herbert Fryer.[2]
P.O. Henry William Martin. (Missing.)
Sto. P.O. James Relf.[2]
Ldg. Sto. Henry William Kemp. (Missing.)
Ldg. Sto. Stanley Pearce.[2]
A.B. William John Morling. (Killed in action.)
Ldg. Sto. Thomas Everitt Chitty.[2]
A.B. Ernest Garbutt. (Missing.)
Ldg. Sto. John Willie Nicholas Akid.[2]
Sto., 1st Cl., Roger Bailey.[2]
Sto., 1st Cl., Samuel McCracken.[2]

[1] See Dispatch of June 15, para. 10.
[2] Received the D.S.M.

Sto., 1st Cl., James Norris.[1]
Sto., 1st Cl., William Thomas Wood.[1]
Sig. George Harold Linegar, R.N.V.R. (Missing.)
Sto., 1st Cl., Philippe Smithers. (Prisoner of war.)
Sto., 1st Cl., George Cross.[1]
Sto., 1st Cl., William John Johnson.[1]
Sto., 1st Cl., Edward Largey.[1]
Sto., 1st Cl., Charles James Fisher. (Missing.)
A.B. Frank Thomas Wilson. (Killed in action.)
Sto., 1st Cl., Frank Neville.[1]
Sto., 1st Cl., Michael Henry.[1]
Sto., 1st Cl., Harold Parr.[1]

In Destroyers.

Shipwt., 1st Cl., George Frater.[1]
Mechn. John Pelham.[1]
P.O., 1st Cl., Charles Potter.[1]
P.O., 1st Cl., Robert Charles Jeffreys.[1]
Yeo. Sigs. Thomas Pinches.[1]

In Motor Launches.

Ch. Yeo. Sigs. Daniel Paul Foley, D.S.M.[2]

The following volunteered for dangerous rescue work. It was largely due to the magnificent manner in which the men of these vessels carried out their duties that so many of the officers and men of the *Vindictive* were rescued :—

Air Mech., 1st Cl., Douglas Gordon Smith, R.N.A.S.[1]
Ch. Motor Mech. Archibald Murray Macfarlane, R.N.V.R. (M.L. 254).[1]
Ch. Motor Mech. Edgar Frank Chivers, R.N.V.R. (M.L. 276).[1]
Ch. Motor Mech. Fred Clark Talbot, R.N.V.R. (M.L. 283).[1]
Ch. Motor Mech. Hugh McMillan, R.N.V.R. (M.L. 128).[1]
Ldg. Dkhnd. John Maclean, R.N.R. (M.L. 128).[1]
Dkhnd. Clive Ingold Gillett, R.N.R. (M.L. 128) (killed in action).

[1] Received the D.S.M. [2] Received bar to D.S.M.

Ldg. Dkhnd. Joseph Hamshaw, R.N.R. (M.L. 276) (killed in action).
Dkhnd. Hugh Sutherland, R.N.R. (M.L. 276).[1]
Dkhnd. Charles Edward Surtees, R.N.R. (M.L. 254).[1]
Dkhnd. William George Clark, R.N.R. (M.L. 283).[1]
Dkhnd. William Hutchinson, R.N.R. (M.L. 276) (killed in action).
Ch. Motor Mech. George Kerr, R.N.V.R. (M.L. 276).[1]
Ch. Motor Mech. George Jones, R.N.V.R. (M.L. 254).[1]
Dkhnd. John Owen Thomas, R.N.R. (M.L. 254) (killed in action).

The following displayed courage and coolness under fire on the nights of 11th/12th April,[2] 22nd/23rd April, and 9th/10th May. These men carried out their duties with great steadiness, and materially contributed to the success of the operations :—

Ldg. Dkhnd. Walter George Farthing, R.N.R. (M.L. 105).[1]
Ldg. Dkhnd. George Turner, R.N.R. (M.L. 274).[1]
Ch. Motor Mech. Robert Rae, R.N.V.R. (M.L. 551).[1]
Ldg. Dkhnd. George McGee, R.N.R. (M.L. 397).[1]

In Coastal Motor Boats.

Ch. Motor Mech. Eric William McCracken, R.N.V.R.[1]
Ch. Motor Mech. Leslie Roy McGinley, R.N.V.R.[1]
Motor Mech. Arthur John Davis, R.N.V.R.[1]
Ch. Motor Mech. Ernest Seymour Mountain, R.N.V.R.[1]
Ch. Motor Mech. Leonard Ernest McQueen, R.N.V.R.[1]

The following Officers, Petty Officers and men also rendered valuable services in action and off the enemy coast :—

Capt. Wilfred Tomkinson, C.B., R.N.
In command of the Destroyers.

Cdr. Frederick E. K. Strong, D.S.O., R.N.
In command of a Destroyer.

[1] Received the D.S.M.

[2] See *supra*, p. 29.

Cdr. Victor L. A. Campbell, D.S.O., R.N.
In command of *Warwick*, flying flag.

Cdr. Patrick E. Parker, R.N.
• Engaged Ostend batteries at close range with *Prince Eugene.*

Cdr. James L. C. Clark, D.S.O., R.N. (Staff of Commodore, Dunkirk).

Cdr. Francis H. Sandford, D.S.O., R.N.

In Command of Off-Shore Destroyers.

Cdr. Henry G. L. Oliphant, M.V.O., D.S.O., R.N. (Senior officer of off-shore force—flying broad pennant of Commodore Lynes).
Cdr. Bertram H. Ramsay, R.N.
Lieut.-Cdr. Astley D. C. Cooper-Key, D.S.O., R.N.
Lieut.-Cdr. Hubert S. Braddyll, R.N.
Lieut.-Cdr. William H. Sandford, R.N.
Lieut.-Cdr. Guy L. Warren, R.N.
Lieut. John R. Johnston, R.N.
Lieut. Christopher H. Ringrose, R.N.

In Destroyers.

Lieut. Richard H. Caldwell, R.N.
Lieut. Frederick H. G. Trumble (killed in action).
Eng. Lieut.-Cdr. Robin Rampling, R.N.

In Monitors.

Lieut.-Cdr. William L. Jackson, R.N.

In Motor Launches.

Lieut. Malcolm MacCallum, R.N.V.R. (M.L. 292).
Lieut. John Gordon, R.N.V.R. (M.L. 397).
Lieut. Arthur G. Bagot, D.S.C., A.M., R.N.V.R. (M.L. 283).
Sub-Lieut. Cyril W. Scott, R.N.V.R. (M.L. 562).
Mid. Harold L. Proctor, R.N.V.R. (M.L. 283).

The following rendered good service in attending wounded and during the transportation of wounded at sea:—

Act. Chap. Rev. Francis M. Jackson, R.N.
Surg. Stanley S. Beare, R.N.

Surg. Roger Buddle, M.B., R.N.
Surg. Bernard S. Collings, R.N.
Payr. (act.) Herbert G. A. Woolley, R.N.

In Destroyers.

Ord. Sea. James William Burns, R.N.V.R.
Snr. Res. Attendant Hugh Hill.
Jnr. Res. Attendant Alexander Roscoe.

The above rendered good service in attending wounded and during the transportation of wounded.

In Monitors.

A.B. Albert Edward Wood.

In Motor Launches.

Dkhnd. Henry George Jarvest, R.N.R. (M.L. 276).
Ldg. Mech. William Henry Grice, R.N.A.S. (M.L. 283).
Ch. Motor Mech. William Patrick Yates, R.N.V.R. (M.L. 128).
Dkhnd. Norman William Vigar, R.N.R. (M.L. 254).
Dkhnd. George Henry Hancock, R.N.R. (M.L. 283).
Dkhnd. Angus Morrison, R.N.R. (M.L. 128).
Dkhnd. Percy Humphreys, R.N.R. (M.L. 276).
Ch. Motor Mech. Herbert George Underwood, R.N.V.R. (M.L. 105).
Dkhnd. Robert Gardner, R.N.R. (M.L. 128).
Air-Mech., 1st Cl., Laurence Henry Sensicle, R.N.A.S. (M.L. 105).

In Coastal Motor Boats.

Ch. Motor Mech. Albert William Saunders, D.S.M., R.N.V.R.
Ch. Motor Mech. Edward Gordon Windley, D.S.M., R.N.V.R.

The co-operation of the Air Force under Brigadier-General Charles L. Lambe, C.M.G., D.S.O., R.A.F., was of great value during the operation. In spite of the fog, the Squadron under the command of Squadron-Commander Herbert G. Brackley, D.S.O., D.S.C., continued to attack in accordance with programme until after the completion of the operation.

In conclusion, I desire to place on record my indebtedness to Vice-Admiral Pierre Alexis Marie Antoine Ronarc'h, K.C.B., C.M.G., Commandant Supérieur de la Marine dans la Zone des Armées du Nord, Dunkerque, for the valuable assistance afforded by the French Navy on the nights of 22nd/23rd April and 9th/10th May, and also in several preparatory operations.

The Vice-Admiral placed at my disposal all the available vessels under his command and assisted me in every possible way, as did Capitaine de Vaisseau Bréart de Boisanger, D.S.O., Chef de Division des Flotilles de la Mer du Nord.

The following Officers[1] distinguished themselves in action in the operations against Ostend:—

Capitaine de Corvette Louis Vennin, T.B.D. *Lestin.*
Capitaine de Corvette Maurice Mottez, T.B.D. *L'Enseigne Roux.*
Lieutenant de Vaisseau Alfred Richard, T.B.D. *Bouclier.*
Premier Maître Patron Pilote Baylet, T.B. No. 320.
Premier Maître Patron Pilote Mozach, T.B. No. 318.
Premier Maître Patron Pilote Rabaste, T.B. No. 341.
Second Maître Delporte, Vedette No. 34.[1]

I have the honour to be,
Sir,
Your obedient Servant,
ROGER KEYES,
Vice-Admiral,
Dover Patrol.

The Secretary of the Admiralty.

[1] In addition to the officers already mentioned in these pages the following received honours for services on April 22-23 (*London Gazette*, July 23, 1918):—D.S.O.: Lieut. John C. Annesley, Chaplain Charles J. E. Peshall. D.S.C.: Lieut. Leonard J. Lee, Lieut. John W. Robinson, Lieut. George F. Bowen, Acting Lieut. Harold V. Rogers, Gunner Thomas Galletly, Acting Art. Engineer William H. Edgar.

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